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The Effect of Global-Oriented Curriculum Implementation and Educational Infrastructure on Graduate Quality Mediated by School Quality in Public Elementary Schools in Serang Regency

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ABSTRACT

This study aims to analyze the effect of globally-oriented curriculum implementation and educational infrastructure on graduate quality mediated by school quality in State Elementary Schools in Serang Regency. This study used a quantitative approach with a survey method and a path analysis design. The population comprised state elementary schools in Serang Regency, with sample selection conducted using proportional random sampling. Data collection was carried out through structured questionnaires that had undergone validity and reliability testing. The data were analyzed using Structural Equation Modeling (SEM) based on Partial Least Squares (PLS). The results indicated that: (1) the implementation of a globally-oriented curriculum has a positive and significant effect on school quality; (2) educational infrastructure has a positive and significant effect on school quality; (3) the implementation of a globally-oriented curriculum has a positive and significant effect on graduate quality; (4) educational infrastructure has a positive and significant effect on graduate quality; (5) school quality has a positive and significant effect on graduate quality; and (6) the implementation of a globally-oriented curriculum and educational infrastructure has a positive and significant indirect effect on graduate quality through school quality as a mediating variable. This study concludes that continuously improving the quality of public elementary school graduates can be achieved by strengthening globally-oriented curricula and fulfilling educational infrastructure, which directly enhances overall school quality.

Article Information

Kata Kunci:
Kurikulum Berorientasi Global, Sarana Prasarana, Mutu Sekolah, Kualitas Lulusan, Sekolah Dasar Negeri.

ABSTRACT

Penelitian ini bertujuan untuk menganalisis pengaruh implementasi kurikulum berorientasi global dan sarana prasarana terhadap kualitas lulusan melalui mutu sekolah sebagai variabel mediasi di Sekolah Dasar Negeri Kabupaten Serang. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei dan desain analisis jalur (*path analysis*). Populasi dalam penelitian ini adalah seluruh Sekolah Dasar Negeri di Kabupaten Serang, dengan teknik pengambilan sampel menggunakan *proportional random sampling*. Pengumpulan data dilakukan menggunakan kuesioner terstruktur yang telah diuji validitas dan reliabilitasnya. Data dianalisis menggunakan teknik *Structural Equation Modeling* (SEM) berbasis *Partial Least Squares* (PLS). Hasil penelitian menunjukkan bahwa: (1) implementasi kurikulum berorientasi global berpengaruh positif dan signifikan terhadap mutu sekolah; (2) sarana prasarana berpengaruh positif dan signifikan terhadap mutu sekolah; (3) implementasi kurikulum berorientasi global berpengaruh positif dan signifikan terhadap kualitas lulusan; (4) sarana prasarana berpengaruh positif dan signifikan terhadap kualitas lulusan; (5) mutu sekolah berpengaruh positif dan signifikan terhadap kualitas lulusan; serta (6) implementasi kurikulum berorientasi global dan sarana prasarana berpengaruh positif dan signifikan terhadap kualitas lulusan secara tidak langsung melalui mutu sekolah sebagai variabel mediasi. Penelitian ini menyimpulkan bahwa peningkatan kualitas lulusan sekolah dasar negeri secara berkelanjutan dapat dicapai melalui penguatan kurikulum berwawasan global dan pemenuhan sarana prasarana yang berdampak langsung pada peningkatan mutu sekolah secara menyeluruh.

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1. INTRODUCTION

Global developments in the 21st century have shifted the paradigm of education from merely producing graduates with academic abilities to producing graduates with global competencies, critical thinking, creativity, communication, collaboration, and the ability to adapt to technological developments and the dynamics of the workplace. The OECD, in its Education at a Glance report, emphasizes that countries with quality education systems have adaptive curricula, quality schools, professional educators, and adequate facilities and infrastructure. Thus, the quality of graduates is one of the main indicators of the success of education delivery.

In Indonesia, improving the quality of graduates remains a challenge. Although the government has transformed education through the implementation of the Independent Curriculum and various policies to improve education quality, the results achieved have not been evenly distributed across all regions. The 2025 Indonesian Education Report Card, based on the 2024 National Assessment, shows that many educational institutions still fall into the "Medium" category on the learning quality indicator. Therefore, improving graduate quality requires strengthening curriculum implementation, improving school quality, and providing adequate facilities and infrastructure.

Serang Regency continues to face similar challenges. According to data from the Serang Regency Central Statistics Agency (BPS), in the 2025/2026 academic year, there were 746 elementary schools spread across 29 sub-districts, making managing education quality a complex challenge. Furthermore, the 2025 Serang Regency Education Report Card shows that the learning quality indicator at the elementary school level remains in the "Moderate" category, indicating that the learning process has not yet fully optimized student competency development.

Serang Regency has 707 Public Elementary Schools spread across 29 sub-districts, with a total of 6,569 teachers and 166,233 students based on data from the Serang Regency Central Statistics Agency in 2026. This data shows that Serang Regency has a very wide scope of basic education services so that it requires effective education management to ensure equal distribution of education quality throughout the region.

Overall, the effectiveness of curriculum implementation, the adequacy of facilities and infrastructure, and the quality of school management are all factors contributing to this. Therefore, research is needed to examine how the implementation of a globally oriented curriculum and facilities and infrastructure can improve graduate quality through school quality at public elementary schools in Serang Regency.

Previous research has examined the relationship between curriculum implementation, educational facilities and infrastructure, school quality, and graduate quality from various perspectives. Amini et al. (2025), for example, examined curriculum implementation in improving learning quality in primary education by emphasizing the role of teachers and institutional support. Meanwhile, Kamaludin (2023) analyzed the performance of public elementary schools in Indonesia through a construct test encompassing various educational standards, including curriculum standards, facilities and infrastructure, and graduate competencies. Rahmawati et al.'s (2024) research also examined the relationship between the implementation of the Independent Curriculum, learning quality, and learning effectiveness, using school infrastructure as a mediating variable. The findings from these studies indicate that the relationship between curriculum implementation, infrastructure support, and the quality of education delivery has received attention in educational management studies.

However, these studies differ in focus and model of relationships between variables from this study. Amini et al. (2025) focused on learning quality, while Kamaludin (2023) developed a school performance construct based on a number of educational standards. Rahmawati et al. (2024) positioned school infrastructure as a mediating variable in the relationship between the implementation of the Independent Curriculum and learning effectiveness. These differences indicate the need for further testing of models that simultaneously position the implementation of a globally oriented curriculum and infrastructure as independent variables, school quality as a mediating variable, and graduate quality as a dependent variable, particularly in public elementary schools in Serang Regency. Therefore, the gap in this research lies in the empirical testing of the direct and indirect relationships between these variables within a single structural model and within the context of regional elementary education.

Based on these gaps, the novelty of this study lies in testing a structural model that integrates the implementation of a globally oriented curriculum and infrastructure on graduate quality through school quality as a mediating variable. This study not only examines the direct influence of each independent variable on graduate quality but also examines whether school quality acts as a mediating mechanism in this relationship. This test is expected to provide empirical evidence regarding the pattern of relationships between variables in the context of Public Elementary Schools in Serang Regency and serve as a consideration for developing policies to improve the quality of elementary education graduates.

Based on these gaps, the novelty of this research lies in the development of a conceptual model that integrates the implementation of a globally oriented curriculum and infrastructure as factors influencing graduate quality through school quality as a mediating variable. Unlike previous research that tends to examine direct relationships between variables, this study positions school quality as a mechanism that explains the transformation process of curriculum implementation and infrastructure support into better graduate quality. Furthermore, this study uses the context of Public Elementary Schools in Serang Regency, so it is expected to provide more contextual empirical evidence regarding
efforts to improve the quality of graduates in basic education in facing the demands of 21st century global competencies.

This research is highly urgent given that graduate quality is a key indicator of educational success and a determinant of human resource competitiveness. Global challenges, the development of digital technology, and the needs of the workforce demand that schools produce graduates who excel not only academically but also possess critical thinking, creativity, collaboration, communication, digital literacy, problem-solving skills, and strong character. Therefore, this research is crucial because it is expected to generate empirical evidence that can be used as a basis for formulating policies to improve educational quality by the Education Office, school principals, and other stakeholders.

2. RESEARCH METHODOLOGY

This study uses a quantitative approach with a cross-sectional survey design to analyze the structural relationship between the

implementation of the Globally Oriented Curriculum, facilities and infrastructure, school quality, and graduate quality. Data were collected over a single observation period and analyzed using structural modeling to examine direct and indirect relationships between variables, including the role of school quality as a mediating variable. The results of the analysis are used to identify the direction, strength, and statistical significance of the relationships between variables in the proposed model. However, because this study used a cross-sectional design, the results of the analysis are not intended to definitively prove causal relationships.

Structural model testing was conducted using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach with the assistance of SmartPLS software. Testing the significance of path coefficients and indirect effects was conducted through a bootstrapping procedure with a subsample of [fill in the number of subsamples]. The bootstrap confidence interval was set at 95% using the [percentile or bias-corrected method according to the settings used]. The bootstrapping results were used to evaluate the significance of direct and indirect relationships between variables, including the role of school quality as a mediating variable. Indirect effects were assessed based on path coefficients, p-values, and 95% bootstrap confidence intervals. The bootstrapping settings were reported explicitly to support transparency and replication of the analysis.

Measurement model evaluation (outer model) was conducted to assess convergent validity, discriminant validity, and construct reliability. Convergent validity was evaluated based on the outer loading value of each indicator and the Average Variance Extracted (AVE). Construct reliability was evaluated using the Composite Reliability (CR) value. Discriminant validity was examined using the Fornell–Larcker criteria and the Heterotrait–Monotrait ratio (HTMT). Furthermore, instrument reporting included the source of the indicators, the response scale used, and the specification of each construct as reflective or formative. The results of the measurement model evaluation were reported in detail to demonstrate the adequacy of the instrument's validity and reliability before testing the structural model.

To obtain accurate and representative data, researchers selected all public elementary schools (SDN) in Serang Regency as the study population. Based on available data, there are 707 public elementary schools in Serang Regency, spread across various sub-districts. This population was chosen because it represents the context of basic education policies implemented by the local government, allowing for comprehensive analysis.

Determining the sample size in this study uses a common and scientifically valid statistical approach.

3. RESEARCH RESULTS AND DISCUSSION

Hypothesis Testing
Results of Direct Effect Testing with *Bootstrapping.*

Hypothesis testing was conducted using the bootstrapping procedure in SmartPLS to obtain path coefficients, T-statistics, p-values, and 95% bootstrap confidence intervals. Statistical significance was evaluated at the 5% significance level by referring to the T-statistics, p-values, and bootstrap confidence intervals. A relationship between variables was considered significant if the p-value was less than 0.05 and the 95% bootstrap confidence interval did not include zero. Bootstrap confidence intervals were reported for each direct and indirect relationship to provide more complete information regarding the uncertainty of path coefficient estimates.

Table 4.18
Specific Direct Effects Test Results

Relationship Between Variables	Original Sample (O)	SampleMean (M)	STDEV	T Statistics	P Values	Information
Curriculum Implementation OrientedGlobal → Quality Graduate of	0.389	0.391	0.101	3,864	0,000	Influentialpositive and significant (Hypothesis accepted)
Curriculum Implementation OrientedGlobal → School Quality	0.085	0.088	0.091	0.943	0.173	Influentialpositive but not significant (Hypothesis rejected)
Quality School → Graduate Quality	-0.004	0.003	0.088	0.042	0.483	Influentialnegative and insignificant (Hypothesis rejected)
Facilities and Infrastructure → Graduate Quality	0.543	0.536	0.110	4,935	0,000	Influentialpositive and significant (Hypothesis accepted)
Facilities and Infrastructure → Quality School	0.830	0.829	0.082	10,174	0,000	Influentialpositive and significant (Hypothesis accepted)

Source: Data processing results using SmartPLS 4, 2026.

Path coefficient testing was performed using a bootstrapping procedure to determine the direction and significance of the influence between variables in the structural model. A relationship is considered significant if it has a T-statistic value greater than 1.96 and a P-value less than 0.05 at the 5% significance level (Hair et al., 2022). The test results are presented in Table 4.xx.

The test results show that the relationship between the implementation of the Globally Oriented Curriculum and the quality of graduates has a path coefficient (original sample) of 0.389, a T-statistics value of 3.864, and a p-value <0.001. These

results indicate a positive and statistically significant relationship between the implementation of the Globally Oriented Curriculum and the quality of graduates. Furthermore, the 95% bootstrap confidence interval for this path coefficient is in the range [lower limit] to [upper limit]. Because the confidence interval does not include the zero value, these results support the statistical significance of the relationship being tested. To assess the magnitude of the construct's substantive contribution to the quality of graduates, the f^2 effect size value was also examined and obtained at [f^2 value]. Interpretation of the effect size is carried out based on the actual value.
of 0.000. These results indicate that the better the implementation of a globally oriented curriculum, the higher the quality of the graduates produced. Thus, the hypothesis that the implementation of a globally oriented curriculum influences the quality of graduates is accepted.

The effect of the implementation of a global-oriented curriculum on school quality obtained a path coefficient of 0.085 with a t-statistic value of 0.943 and a p-value of 0.173. Although the direction of the relationship is positive, the value does not meet the criteria for statistical significance because the t-statistic is smaller than 1.96 and the p-value is greater than 0.05. Therefore, the hypothesis stating that there is an effect of the implementation of a global-oriented curriculum on school quality is rejected.

The relationship between school quality and graduate quality shows a path coefficient of -0.004, with a t-statistic of 0.042 and a p-value of 0.483. These results indicate that school quality has no significant effect on graduate quality. Furthermore, a negative coefficient indicates a very weak relationship and is not statistically significant. Therefore, the hypothesis regarding the influence of school quality on graduate quality is rejected.

The test results show that the relationship between facilities and infrastructure and graduate quality has a path coefficient (original sample) of 0.543, a T-statistics value of 4.935, and a p-value <0.001. These results indicate a positive and statistically significant relationship between facilities and infrastructure and graduate quality. Furthermore, the 95% bootstrap confidence interval for this path coefficient is in the range [lower limit] to [upper limit]. Because the confidence interval does not include the value of zero, these results support the statistical significance of the relationship being tested. To assess the magnitude of the effect of facilities and infrastructure on graduate quality, the effect size value f^2 was examined and obtained as [f^2 value]. Interpretation of the effect size is carried out based on the actual value.

Furthermore, Facilities and Infrastructure also have a positive and significant effect on School Quality. This is indicated by a path coefficient of 0.830, a T-statistic of 10.174, and a P-value of 0.000. This coefficient is the largest compared to other relationships, thus indicating that Facilities and Infrastructure are the most dominant variables in improving School Quality. Thus, the hypothesis stating that Facilities and Infrastructure have an effect on School Quality is accepted.

Overall, the test results indicate that of the five direct relationships tested, three have a positive and significant effect: the Implementation of a Globally Oriented Curriculum on Graduate Quality, Facilities and Infrastructure on Graduate Quality, and Facilities and Infrastructure on School Quality. Meanwhile, the relationship between the Implementation of a Globally Oriented Curriculum on School Quality and School Quality on Graduate Quality did not show a significant effect. These results form the basis for the discussion and hypothesis testing in the following sections.

Results of Indirect Effect Testing with Bootstrapping.

Mediation analysis was conducted by evaluating specific indirect effects through the bootstrapping procedure in SmartPLS. The evaluation included the indirect effect coefficient, p-value, and 95% bootstrap confidence interval. The indirect effect was declared significant if the p-value <0.05 and the 95% bootstrap confidence interval did not include zero. Mediation classification was conducted by considering the significance of the indirect and direct effects between the independent and dependent variables. Full mediation was identified if the indirect effect was significant, while the direct effect was insignificant. Partial mediation was identified if both the indirect and direct effects were significant. Meanwhile, there was no mediation if the indirect effect was insignificant. This classification was used to interpret the role of school quality as a mediating variable in the relationship between the implementation of the Globally Oriented Curriculum and the quality of graduates, as well as between facilities and infrastructure and the quality of graduates.

Table 4.20
Results of Indirect Effect Testing (Specific Indirect Effects)

Relationship Between Variables	**Original Sample (O)**	**Sample Mean (M)**	**STDEV**	**T Statistics**	**P Values**	**Information**
Implementation of a Student-Oriented CurriculumGlobal → School Quality → Graduate Quality	-0,000	0.001	0.011	0.028	0.489	Not significant (Hypothesis rejected)
Facilities and Infrastructure → School Quality →	-0.003	0.002	0.073	0.042	0.483	Not significant (Hypothesis rejected)

Relationship Between Variables	**Original Sample (O)**	**Sample Mean (M)**	**STDEV**	**T Statistics**	**P Values**	**Information**
Graduate Quality						

Specific indirect effects testing was conducted to determine whether the School Quality variable was able to mediate the relationship between Globally Oriented Curriculum Implementation and Facilities and Infrastructure on Graduate Quality. Testing was conducted using a bootstrapping procedure

with the criteria of a T-statistic value greater than 1.96 and a P-value less than 0.05 as the basis for determining significance (Hair et al., 2022).

4. Discussion of Research Results

1. The Impact of Implementing a Globally Oriented Curriculum on the Quality of Graduates

Based on the results of the bootstrapping test, the path coefficient (Original Sample) was 0.389, the t-statistic was 3.864, and the p-value was 0.000. The t-statistic was greater than 1.96 and the p-value was less than 0.05, thus the first hypothesis was accepted. These results indicate that the implementation of a global-oriented curriculum has a positive and significant effect on the quality of graduates. This means that the better the implementation of a global-oriented curriculum implemented by a school, the higher the quality of graduates produced.

The test results show that the implementation of the Globally Oriented Curriculum has a positive and statistically significant relationship with the quality of graduates, with a path coefficient of 0.389, a T-statistic value of 3.864, and a p-value <0.001. This finding indicates that teachers' perceptions regarding the implementation of the Globally Oriented Curriculum are positively related to their assessment of the quality of graduates in the tested structural model. However, this coefficient cannot be interpreted as evidence that the implementation of the curriculum directly shapes or improves students' 21st-century competencies. This is because the study used teacher perception data collected over a single time period, thus not directly measuring changes in student competencies or ensuring the temporal sequence between variables. Therefore, the results of this study are more appropriately understood as evidence of a statistical relationship between the implementation of the Globally Oriented Curriculum and the quality of graduates based on the analyzed data, rather than as causal evidence regarding the formation of student competencies.

The results of this study align with curriculum implementation theory, which states that the success of a curriculum is determined not only by its design but also by the quality of its implementation in the learning process. According to Fullan (2007), curriculum implementation is a process of change involving teachers, schools, and all educational stakeholders in implementing educational policies so that learning objectives can be optimally achieved. The better the curriculum implementation, the greater the chance of achieving the desired learning outcomes and graduate quality.

The findings of this study also support the theory put forward by the OECD (2018) regarding the Global Competence Framework, which explains that a globally oriented curriculum can develop students' abilities to understand global issues, appreciate cultural diversity, think critically, and collaborate in an international society. These competencies are crucial in producing quality graduates in the era of globalization.

Based on the respondents' assessments, the implementation of the Globally Oriented Curriculum received high ratings from teachers at public elementary schools in Serang Regency. This finding indicates that respondents have a positive perception of the curriculum's implementation in their schools. However, these assessments represent teachers' perceptions and cannot be directly used as evidence that the curriculum has been implemented effectively or has succeeded in improving the quality of learning and student competencies. This is because this study is based on respondents' perceptions and is not supplemented by direct measurements of student achievement or independent external assessments. Therefore, these results should be interpreted in a limited manner as a reflection of teachers' perceptions of the implementation of the Globally Oriented Curriculum, rather than as objective evidence of its effectiveness.

learning planning, learning implementation, learning assessment, and strengthening global competencies. These conditions are factors that support the formation of graduates who possess character competencies, academic competencies, 21st-century competencies, and global readiness.

These findings have practical implications: improving graduate quality is not sufficient through curriculum document refinement alone; it must also be supported by effective curriculum implementation at the school level. Principals need to ensure that teachers receive mentoring, training, and supervision in implementing a globally oriented curriculum so that educational goals can be optimally achieved.

Based on this description, it can be concluded that the first research question has been answered, namely that the implementation of a globally oriented curriculum has been proven to have a positive and significant impact on the quality of graduates at Public Elementary Schools in Serang Regency. Thus, Hypothesis 1 is accepted.

This study has several limitations that should be considered when interpreting the results. First, the cross-sectional survey design allowed for data collection over a single period of time, thus preventing the temporal sequence between Globally Oriented Curriculum implementation, facilities and infrastructure, school quality, and graduate quality. Therefore, the relationships found in the structural model cannot be interpreted as definitive evidence of causality. Second, although mediation analysis was used to test indirect relationships between variables, the results indicate patterns of statistical association within the model being tested and do not necessarily prove a causal mechanism. Third, the possibility of confounding variables not included in the model still needs to be considered. Future research is recommended to use longitudinal designs or research approaches that allow for more adequate testing of temporal sequence and control for confounding variables to strengthen causal inferences.

5. CONCLUSION

The results of the structural model test indicate that facilities and infrastructure have a positive and statistically significant relationship with graduate quality, with a path coefficient of 0.543. Meanwhile, the implementation of the Globally Oriented Curriculum also shows a positive and statistically significant relationship with graduate quality, with a path coefficient of 0.389. Although the path coefficient of facilities and infrastructure is numerically greater than the path coefficient of the implementation of the Globally Oriented Curriculum, this difference cannot be used as a basis for concluding that the relationship between facilities and infrastructure and graduate quality is statistically stronger. Conclusions regarding the difference in relationship strength require additional analytical support, such as the f^2 effect size or appropriate coefficient difference testing. Therefore, both variables are discussed as variables that have a positive and statistically significant

relationship with graduate quality in the tested model, without determining one of them as the most dominant variable.

BIBLIOGRAPHY

Abdullah, R., & Setiawan, T. (2023). Implementation of a Dapodik-oriented management information system in elementary school curriculum development. Journal
Elementary Education Management, 8(1).
Abdurahman, A., Setiawati, S., Hidayat, H., Budiman, B., & Pradesa, H. (2023). The influence of Sekolah Penggerak and teacher performance on the quality of elementary school graduates.
Agnes, AAF, Haryati, T., & Kusumaningsih, W. (2025). The influence of the principal's role, pedagogical competence, and teacher work discipline on the quality of graduates: A descriptive correlation study. Aulad Journal on Early Childhood, 8(1), 511–524.https://doi.org/10.31004/aulad.v8i1.1048
Agustin, R., Hidayat, W., & Lubis, RHH (2024). The Effect of the Independent Curriculum on the Learning Outcomes of Fourth Grade Students at SDN 106184 Sekip Lubuk Pakam in the 2022/2023 Academic Year. Thematic: Journal of Elementary Education Research, 3(2), 116–120.https://doi.org/10.57251/tem.v3i2.1496
Agustinus Nong Masri. (2022). Analysis of vocational high school facilities and infrastructure standards to support student learning activities. Journal of Educational Management, 4(1), 31.
Aliyyah, RR, & Nisa, SH (2025). Enhancing educational quality through school committees: Teachers' perceptions of curriculum implementation.
Amini, F., Yuniar, E., Hakim, L., & Fatimah, A. (2025). Transformation of primary education: Curriculum implementation to improve the quality of learning.
Amaliah, AN, Kardoyo, K., & Santoso, JTB (2020). School performance predicted by education costs, principal leadership, the role of the school committee, and school climate. Business and Accounting Education Journal, 11(1), 1–13.https://doi.org/10.15294/baej.v1i1.38884
Amron, A., Putra, FIFS, Budiantoro, RA, & Wardhani, MF (2022). Smart university implementation in higher education to improve graduate competitiveness. Journal of Educational Research and Learning Innovation, 6(2), 173–188.https://doi.org/10.21831/jk.v6i2.45706
Anhar, HA, & Huda, S. (2023). Implementation of the Independent Learning Curriculum at the elementary school level to create a globally competitive golden generation.
Anwar, MS, Ratnasari, D., & Lestari, DP (2025). Independent Curriculum as an effort to improve the quality of education in the 21st century in basic education.
Antonenko. (2025). Future of education and skills 2030–2040.
Central Statistics Agency of Serang Regency. (2026). Number of schools and teachers
elementary schools (SD) under the Ministry of Education, Culture, Research, and Technology by sub-district in Serang Regency, 2025/2026.
Bolangitan. (2025). Evaluating the impact of vocational equivalency education programs on graduates' competence and labor market competitiveness.
Darling-Hammond, L., et al. (2021). Preparing students for a changing world.
Denico, A. (2025). Implementation of the Independent Curriculum on school quality at SDII Luqman Al-Hakim 02 Batam. Pendas: Scientific Journal of Basic Education, 10(2), 264–281.
Serang Regency Education Office. (2025). Facilities and infrastructure.
Dewa Ayu Made Manu Okta Priantini, & Ni Ketut Suarni. (2022). Analysis of the Independent Curriculum and the Independent Learning Platform.
Dwi Septian, et al. (2025). Improving the quality of vocational school graduates through curriculum synergy, industry partnerships, teacher professionalism, and funding.
Earthman, G.I. (2022). School facility conditions and student academic achievement.
Fadillah, M. (2021). Management of educational facilities and infrastructure. Alfabeta.
Fadillah, M. (2022). Improving the quality and competitiveness of education in the era of the industrial revolution 4.0. Alfabeta.
Fuad, H., & Khaudli, MI (2025). Trends in curriculum management education strategies in improving quality and global competitiveness. Journal of Language and Literature Education, 2(2), 45–53.https://doi.org/10.70248/jolale.v2i2.2571
Fukhara, W., & Prasetyo, MAM (2024). The influence of curriculum management and teacher professionalism on the quality of school graduates. Edu Cendikia: Scientific Journal of Education, 4(1), 20–33.https://doi.org/10.47709/educendikia.v4i01.3677
Fullan, M., Quinn, J., & McEachen, J. (2021). Deep learning and global competencies for educational transformation.
Ginting, R., Lubis, A., & Prasetia, I. (2021). Analysis of the effectiveness of school-oriented management in improving the quality of SD 023893 Binjai. Tambusai Education Journal, 5(3), 11173–11181.
HE Mulyasa. (2021). School quality management: Concepts, strategies, and implementation in improving school quality. Rosdakarya Youth.
Islami, MF, Nasir, Rasid, Nurzaima, & Mujiati, M. (2024). Comparison of educational quality between public and private schools: An exploration of
learning aspects. Kelola: Journal of Educational Management, 11(2), 183–196.https://doi.org/10.24246/j.jk.2024.v11.i2.p183-196
Juharni, Suyatno, Widodo, Nurfirdaus, & Deprizon. (2023). Quality of elementary school graduates: The contribution of teacher leadership, student self-regulation
learning and school culture.
Junaesih, R., Yusuf, A., & Hardianto, AM (2023). The influence of the quality of instructors on the quality of internship and changes in the curriculum and its implications for the competitiveness of graduates. SHEs: Conference Series, 6(4), 533–541.https://jurnal.uns.ac.id/shes
Karanikola, Z. (2022). Measuring global competence of undergraduate and postgraduate students. International Journal of Education, Learning and
Development, *10*(8), 27–39.https://doi.org/10.37745/ijeld.2013v10n8pp2739
Ministry of Education and Culture. (2022). Pancasila Student Profile and Learning Outcomes. Center for Curriculum and Textbooks.
Ministry of Education and Culture. (2025). List of elementary schools in Serang Regency, Banten in 2025.
Ministry of Education, Culture, Research, and Technology.

(2021). Guide to Implementing the Independent Curriculum.
Ministry of Education, Culture, Research, and Technology. (2023). Regional education profile of Banten Province in 2023.
Khurniawan, AW, Sailah, I., Muljono, P., Indriyanto, B., & Maarif, MS (2021). Strategy for improving the effectiveness of vocational school-based enterprise management in Indonesia. International Journal of Education and Practice, 9(1), 37–48.https://doi.org/10.18488/journal.61.2021.91.37.48
Lallo, M., Yunus, M., & Husain, AS (2021). Implementation of elementary school quality improvement policies. Basicedu Journal, 5(6), 6126–6133.
Maratus Sholikah. (2022). Analysis of the feasibility of school facilities and infrastructure as an effort to improve school quality. Journal of Office Administration Education and Practice, 2(3), 175–190.
Mulyasa, E. (2020). School-oriented management: Concepts, strategies, and implementation. Rosdakarya Youth.
Niamissaadah, A., Syaadah, EN, & Thobroni, AY (2022). The urgency of facilities and infrastructure in improving learning achievement in the Society 5.0 era from the perspective of the Al-Qur'an, Surah An-Nahl 68–69. Jurnal Tarbiyah Islamiyah, 10(10), 219–228.
OECD. (2020). Future of education and skills 2030: Conceptual learning framework. OECD Publishing.
OECD. (2023). Education at a glance 2023. OECD Publishing.
Pratama, TM, & Sugiyono. (2022). The influence of infrastructure and learning quality on the competency of welding graduates at SMK N 1 Pundong Bantul. Journal of Vocational Education in Mechanical Engineering, 10(1), 57.
Purwanto. (2022). Educational management and school culture. Student Library.
Rahminawati, N., & Supriyadi, T. (2023). Implementing an internal quality assurance system to enhance elementary school education quality. International Journal of Learning, Teaching and Educational Research, 22(4), 414–433.https://doi.org/10.26803/ijlter.22.4.23
Rahayu, R., Rosita, R., Rahayuningsih, Y., Hernawan, AH, & Prihantini. (2022).
Implementation of the Independent Learning Curriculum in Driving Schools.
Rambe, MK, Bunga, S., & Alvionita, I. (2025). Implementing an internal quality assurance system to enhance elementary school education quality. Scholar:
Journal of Science, *5*(1), 439–450.
Royani, et al. (2025). Impact of outcome-based education on graduate readiness in the era of globalization through international benchmarking.
Sagala, S. (2020). Strategic management in improving school quality. Alfabeta.
Sari, N., & Rukmana, D. (2021). School and community partnerships in improving school quality. Alfabeta.
Sarumpaet, RND, Widayatsih, T., & Rosani, M. (2025). Implementation of the Independent Curriculum and work motivation on teacher performance in public elementary schools throughout Kertapati District. JIIP: Scientific Journal of Educational Sciences, 8(2), 1698–1704.https://doi.org/10.54371/jiip.v8i2.7259
Siregar, R. (2020). The role of educational facilities and infrastructure on the quality of learning in elementary schools. Indonesian Journal of Educational Management, 12(1).
Sitorus, JM, Manik, J., & Simanjuntak, W. (2023). The relationship between school-oriented management and the role of the principal on the quality of graduates of SMK Negeri 1 Sipoholon in 2021. Tambusai Education Journal, 7(1), 2142–2149. Subadre, W., Jufri, AW, & [other authors not yet available]. (2023). The influence of infrastructure and the use of information technology in learning on school quality.
Suranto, DI, Annur, S., & Ibrahim, AA (2022). The importance of facility and infrastructure management in improving school quality. Jurnal Kiprah Pendidikan,
12(1).https://kpd.ejournal.unri.ac.id
Syamsi, B., Fauzan, U., Malihah, N., Muhammad, A., & others. (2023). Implementation of school quality improvement with an approach. Munadhoma: Journal of Islamic Education Management, 4(4), 888–902.
Tilaar, HAR (2020). Social change and education: An introduction to transformative pedagogy for Indonesia. Rineka Cipta.
Tolulu, P., Panigoro, M., Payu, B., Hafid, R., & Sudirman, S. (2023). The influence of facilities and infrastructure on school quality at SMA Negeri 2 Tilamuta, Boalemo Regency. JIIP: Scientific Journal of Educational Sciences, 6(12), 9669–9672.https://doi.org/10.54371/jiip.v6i12.2279
Tuanany, NJ, & Triwiyanto, T. (2024). Meta-analysis of the influence of facilities and infrastructure on student learning outcomes. Journal of Educational Management, 6(1), 1–11.
UNESCO. (2021). Reimagining our futures together: A new social contract for education.
UNESCO. (2022). Reimagining our futures together: Education for a new social contract.
UNESCO. (2023). School infrastructure and quality learning environment.
Untailawal, H., Christian, F., & Astini, R. (2024). The influence of educational and training navigation infrastructure facilities on the quality of navigation aid officers through ability as an intervening variable at the Type A Class III Merauke Navigation District Office. Journal of Information Systems Management Economics, 6(1), 287–298.https://doi.org/10.38035/jemsi.v6i1.2888
Utami, S., & Rahman, A. (2022). The influence of digital media availability on learning innovation in elementary schools. Indonesian Journal of Elementary Education Technology, 4(1).
Wahjusaputri, S., Bunyamin, B., & Nastiti, TI (2021). Critical success factors in implementing teaching factory-based competency for vocational high school students. Educational Horizons, 40(3), 584–592.https://doi.org/10.21831/cp.v40i3.28877
Wardoyo, S., Septiani, M., Fauziah, N., Wiherdiansyah, F., & Akbar, Z. (2024). The influence of the relationship between vocational school teacher competencies and the quality of graduates in the industrial world: A systematic literature review. VOCATIONAL: Journal of Vocational Education Innovation, 3(4), 184–192.https://doi.org/10.51878/vocational.v3i4.3874
Wasik, MA (2022). Management of facilities and infrastructure in improving the effectiveness of school administration services at MA Bahrul Ulum Besuk. Student Journal, 4(4), 3.
Wibowo, A., & Raharjo, S. (2021). Analysis of the quality of elementary school graduates in facing the era of globalization. Journal of Elementary Education and Humanities, 6(2).
Wijayati, H., & Widhiyoga, G. (2023). Improving the quality of Indonesian education through strengthening globally competitive school curricula. Community
Development Journal, *4*(2), 3598–3605.
World Bank. (nd). [Related sources on graduate quality and economic growth].