

ANALYSIS OF EDUCATION REPORT CARD UTILIZATION FOR SCHOOL QUALITY MAPPING VIA DEMING CYCLE

Enik Indartik¹, Nurul Zuriah², Arina Restian³

¹²³Universitas Muhammadiyah Malang; Indonesia

Correspondence E-mail; enoxenix@gmail.com

Submitted: 04/01/2026

Revised: 14/02/2026

Accepted: 07/03/2026

Published: 31/03/2026

Abstract

This research analyzes the utilization of the Education Report in mapping and improving school quality using the Deming Cycle approach at Vocational High Schools (SMK) in Mojokerto Regency. The study is motivated by the necessity for schools to adopt a data-based quality management system that supports planning, implementation, evaluation, and continuous quality improvement. This study employs a qualitative approach with a multisite research design. The research subjects consist of the school principals, deputy principals in charge of curriculum, student affairs, facilities and infrastructure, public relations and industry relations, as well as administrative coordinators at State Vocational High School 1 Punging, State Vocational High School 1 Trowulan, and State Vocational High School NU Ma'arif Jatirejo. Data collection involved in-depth interviews, direct observations, and documentation studies of planning and school quality reports. Data analysis followed the stages of data reduction, data presentation, and conclusion drawing, applying source triangulation to ensure data validity. The findings indicate that the Education Report serves as a foundation for developing school program planning, implementing quality improvement activities, evaluating school performance, and preparing for continuous follow-up improvements. The application of the Deming Cycle encourages schools to make data-based decisions and strengthen their internal quality management systems. Supporting factors for implementation include the commitment of school leadership, active involvement of the management team, and the availability of integrated quality data. Inhibiting factors include limited facilities and infrastructure for practice, differences in human resource competencies, and suboptimal utilization of quality data across all work units. This study concludes that integrating the Education Report with the Deming Cycle approach is effective in supporting systematic and continuous mapping and improvement of SMK quality.

Keywords

Deming Cycle, Education, Report, School Quality.



© 2026 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY NC) license (<https://creativecommons.org/licenses/by-nc/4.0/>).

INTRODUCTION

Educational management is conceptualized as an integrated and systematic process encompassing planning, implementation, supervision, and evaluation in order to achieve predetermined educational goals. Effective management ensures that educational institutions operate in a coordinated manner toward continuous quality improvement, rather than merely fulfilling administrative requirements. This perspective aligns with the view that educational governance must be structured, measurable, and oriented toward the sustainable development of institutional performance (Restian, 2019). In the context of Vocational High Schools (SMK) in Mojokerto Regency, the core academic problem of this study lies in the limited optimization of the Education Report as a strategic instrument for school quality mapping within the Deming Cycle framework. The Education Report, published by Kemendikbudristek, provides comprehensive indicators covering learning outcomes, school climate, teacher quality, and governance dimensions (Kemendikbudristek, 2023). Despite this, data from the Mojokerto Regency Education Annual Report indicate persistent disparities in literacy, numeracy, and graduate competency achievement among high schools, with several institutions still categorized at the developing level of performance (Pendidikan, 2023). Ideally, the Plan stage in the Deming cycle requires schools to conduct systematic gap analysis based on valid data, align school work plans with identified priority indicators, and formulate measurable quality targets (Aini et al., n.d.; Rofiqoh Dwisusanti, 2025). However, empirical tendencies reveal that Education Report data are often treated as administrative documentation. This is rather than as the primary reference for strategic planning, indicating a gap between the philosophy of data-based planning and its implementation at the school level (Sinaga, 2023).

From the standpoint of the Do and Check phases, the effectiveness of the Education Report is contingent upon the consistency with which schools translate mapped indicators into concrete and conduct systematic monitoring. National Education Standards emphasize that educational units must implement internal quality assurance processes to ensure sustainable enhancement of learning outcomes. In this regard, reliable and credible data become central to informed decision-making. The validity of data, particularly in qualitative-based evaluation processes, can be strengthened through triangulation, ensuring that conclusions are supported by multiple sources and forms of evidence (Bachri, 2012). Applied to school management, this principle implies that Education Report data should be corroborated with classroom assessments, supervision reports, and stakeholder

feedback. Although all high schools in Mojokerto Regency have access to the digital Education Report dashboard, the depth of its analytical use varies across institutions (Kementerian Pendidikan, Kebudayaan, Riset, 2022). Some schools conduct periodic internal evaluations comparing planned targets with actual achievements, while others limit their use of data to annual reporting. Such inconsistency demonstrates partial adherence to the Check principle of the Deming Cycle, which requires continuous evaluation and reflective analysis to detect performance gaps (Sari, 2022). In vocational education settings, alignment between graduate competencies and labor market demands is particularly critical; however, internship evaluation data and employability indicators are not always systematically integrated into internal monitoring mechanisms (Baswedan et al., 2025; Siswanto & Fatimah, 2024).

Concerning the Act phase, the extent to which Education Report findings are translated into corrective and preventive measures determines the overall effectiveness of quality mapping. Sustainable educational improvement necessitates structured follow-up actions embedded within school policies and development programs (Badan Standart Nasional Pendidikan, 2020). While Mojokerto Regency has demonstrated gradual improvement in selected performance indicators over recent years, progress remains uneven among schools, suggesting disparities in the quality of follow-up implementation (Hendra et al., 2023). Ideally, the Deming model requires schools to institutionalize evaluation results through curriculum refinement, targeted teacher professional development, and strengthened academic supervision systems (Mujianto et al., 2025). Nevertheless, in practice, many follow-up initiatives remain programmatic and short-term rather than systemic and strategic. This suggests that the utilization of Education Report data has not yet fully aligned with the established national quality assurance standards, including the Graduate Competency Standards stipulated in Permendikbudristek No. 5 of 2022 (Kementerian Pendidikan, Kebudayaan, Riset, 2022). Therefore, examining the use of the Education Report in Mojokerto Regency through the lens of the Deming Cycle is crucial to determine whether it functions as an effective instrument for evidence-based school quality mapping and continuous improvement, or merely as a formal compliance mechanism within administrative procedures.

Recent scholarship has increasingly explored the relationship between data-driven educational governance, school quality improvement, and the implementation of the Deming Cycle. Despite this growing body of literature, the integration of the Education Report within a comprehensive Deming-based quality management framework at the secondary school level

remains insufficiently examined. The following section presents five relevant empirical studies published within the last five years, followed by a critical synthesis of their limitations and the research gap addressed by the present study. The first study found that the use of the Education Report strengthened accountability in elementary school management through the systematic analysis of dashboard indicators, which enabled school leaders to enhance transparency, develop evidence-based plans, and identify performance gaps more accurately (Holilah et al, 2024).

The second study found that the implementation of the Deming Cycle within a vocational school quality assurance system strengthened institutional discipline, improved systematic planning practices, and fostered a reflective quality culture through structured planning, organized execution, and periodic evaluation activities (Trisnantari & Jannah, 2025). The third study revealed that the use of the Education Report as a foundation for data-based planning enhanced the accuracy of school improvement programs in public elementary schools because school leaders were able to interpret literacy, numeracy, and school climate indicators strategically, although the analysis remained limited to the planning stage of the continuous improvement cycle (AW Astuti, A Azainil, 2025).

The fourth study found that the implementation of the Deming Cycle in vocational school instructional processes improved classroom monitoring, encouraged teacher reflection, and strengthened instructional consistency through cyclical planning, structured observation, feedback mechanisms, and systematic revision procedures (Hendra et al., 2023). The fifth study revealed that the development of a systematic and measurable evaluation instrument for vocational high school internship programs enhanced the alignment between graduate competencies and industry requirements by strengthening structured data collection and assessment practices, although the model was not integrated into a formal PDCA framework or linked to the Education Report system (Prabowo et al., 2024).

A synthesis of these five studies reveals several critical gaps. First, research focusing on the Education Report primarily addresses accountability and planning dimensions but does not evaluate its effectiveness across all stages of the PDCA cycle (AW Astuti, A Azainil, 2025; Enong Holilah, Siti Maesyaroh, 2024). Second, studies centered on PDCA implementation emphasize internal quality assurance processes without incorporating standardized national data platforms as central analytical references (Sari, 2022; Trisnantari & Jannah, 2025). Third, vocational education research has concentrated on outcome relevance and program evaluation but has not systematically

linked these efforts to the utilization of the Education Report within a cyclical management framework (Prabowo et al., 2024). Fourth, none of the reviewed studies comprehensively assesses the alignment between Education Report utilization and national quality assurance standards within a regional, multi-school context. These gaps indicate the need for an integrative study that bridges national data systems, continuous improvement theory, and institutional practice at the secondary education level.

The present study offers a substantive contribution by positioning the Education Report as the central variable within a fully operationalized Deming Cycle framework in high schools in Mojokerto Regency. Unlike prior research that examined either Deming implementation or Education Report utilization independently, this study integrates both constructs systematically across the stages of planning, implementation, evaluation, and corrective action. Furthermore, it measures the degree of alignment between Education Report utilization and national quality assurance standards, thereby connecting macro-level policy frameworks with school-level managerial practices. By employing triangulation procedures to strengthen data validity and analytical rigor, this research develops an empirical model demonstrating how nationally standardized quality data can function as a dynamic instrument for sustainable school improvement rather than merely serving as an administrative reporting requirement.

This study aims to investigate the integration of the Education Report within the Deming Cycle framework in Vocational High Schools in Mojokerto Regency and to assess its effectiveness in supporting systematic, data-based school quality mapping and continuous improvement. By examining how Education Report indicators are embedded across the stages of planning, implementation, evaluation, and follow-up, this research seeks to determine whether the instrument functions as a strategic management tool or remains limited to administrative compliance. Theoretically, this study contributes to the advancement of educational quality management discourse by developing an integrative framework that connects national data systems with continuous improvement theory. It extends prior research by positioning the Education Report as a central component within a fully operationalized Deming cycle at the secondary vocational level, thereby strengthening the conceptual linkage between data-driven governance and institutional quality assurance. Practically, the findings are expected to provide contextual and actionable guidance for school leaders, supervisors, and local education authorities in optimizing the use of the Education Report for evidence-based planning and sustainable performance enhancement. The

proposed integrative model may serve as a reference for strengthening quality management practices in vocational education and for informing policy decisions at the regional level.

METHOD

This study employs a qualitative research design using a multi-site approach. The data collected comprises information regarding the utilization of Educational Reports in mapping and enhancing the quality of schools through the Deming Cycle approach. This data focuses on managerial practices, decision-making processes, and the implementation of data-driven quality management at the level of Vocational High Schools (SMK), specifically at Vocational High School 1 Punging, State Vocational High School 1 Trowulan, and State Vocational High School NU Ma'arif Jatirejo. Data were gathered through three main methods: interviews, observations, and documentation. Interviews were conducted with the school principal, the vice-principal responsible for curriculum, the student affairs officer, the public relations and industrial relations officer, the facilities and infrastructure officer, and the administrative coordinator. This selection of interviewees was made using purposive sampling due to the direct involvement of the management team in managing and utilizing educational reports for evaluation and quality enhancement of the school. Observations were undertaken between July and October 2025 to explore activities associated with the implementation of the school's work programme, quality evaluation practices, and the utilization of educational reports in managerial decision-making. Particular attention was given to examining how the Deming Cycle was operationalized across the stages of planning, implementation, monitoring, and follow-up within school improvement initiatives. Documentation was conducted to collect data from official school records, including strategic plans, annual work programmes, internal evaluation reports, meeting minutes, and Educational Reports. These documents were utilised to substantiate and reinforce the findings obtained from interviews and observations. Data were sourced from both primary and secondary sources. Primary data were obtained directly from interviews and field observations involving key stakeholders within the school. Secondary data were derived from relevant documents concerning school quality management.

Data analysis was conducted following the interactive model proposed by Miles and Huberman, which includes several stages: data reduction, data presentation, and conclusion drawing. In the data reduction stage, the researcher selected and focused on information pertinent

to the research objectives. The reduced data were then organised and presented in descriptive narratives and thematic matrices to identify patterns and relationships among themes. Ultimately, conclusions were drawn and continuously verified throughout the research process. The researcher conducted a critical analysis of the implementation of data-driven school quality management using relevant theoretical perspectives on quality management and the Deming Cycle. Furthermore, the findings were compared with previous studies related to strengthening the interpretation and enhancing analytical.

FINDINGS AND DISCUSSION

Findings

Research findings were obtained through in-depth interviews, observations, and document analyses of school management practices in three Vocational High Schools in Mojokerto Regency. Findings are presented based on the stages of the Deming Cycle: planning (Plan), implementation (Do), evaluation (Check), and follow-up (Act), illustrating the utilization of the Education Report in systematically mapping school quality.

Table 1. The Use of Rapor Pendidikan in Mapping School Quality in Vocational High Schools in Mojokerto Regency

No.	SMK	Plan	Do	Check	Act
1.	SMKN 1 Pungging	Develops data-driven strategic and annual plans aligned with quality indicators; emphasizes structured academic supervision and industry-university partnerships.	Implements systematic supervision, structured industry collaboration, and phased facility improvement based on tracer study findings.	Conducts performance review through supervision analysis and comparison with quality targets; identifies instructional strengths and gaps.	Adjusts policies and programs, strengthens supervision mechanisms, refines teaching materials, and optimizes partnerships.
2.	SMKN 1 Trowulan	Designs strategic planning grounded in quality mapping; integrates curriculum supervision with external collaboration to enhance	Executes scheduled academic monitoring and institutional partnerships; manages facilities and industrial practice systematically.	Evaluates program alignment with process standards and partnership effectiveness using institutional reports and	Revises institutional programs and strengthens curriculum implementation and administrative quality.

		relevance.			quality data.	
3.	SMK NU Ma'arif Jatirejo	Utilizes Education Report as a planning reference; however, external collaboration planning remains limited.	the	Implements programs according to institutional capacity; focuses on student discipline, counseling, and gradual facility management.	Conducts internal review meetings, though data- based analytical depth remains moderate.	Applies incremental improvements, prioritizing regulatory reinforcement and administrative refinement

Source: Findings from field research conducted through observation and interviews at three vocational high schools in Mojokerto Regency, 2025.

Utilization of the Education Report in the Deming Cycle

Planning Stage (Plan)

Findings indicate that the three SMKs in this study have utilized the Education Report as a basis for developing strategic planning. The school principal develops strategic plans and annual work programs based on quality evaluation results. These results include achievement indicators from the 2024 Education Report. This planning encompasses several key areas: human resource management, the strengthening of the learning process, the development of facilities and infrastructure, and the enhancement of partnerships with industry. In the curriculum field, SMKN 1 Pungging and SMKN 1 Trowulan plan structured learning supervision by utilizing learning achievement data to identify strengths and weaknesses in the learning process. Both schools also plan collaborations with industry and universities to enhance curriculum relevance. Meanwhile, SMK NU Ma'arif Jatirejo shows limitations in planning learning collaborations and requires strengthening in this aspect. In the student affairs field, all three schools plan rules and extracurricular activities participatively involving the school community. The deputy principal responsible for student affairs coordinates with guidance counseling teachers, class advisors, and student organizations. In facilities and infrastructure and industry relations, schools develop plans based on needs analysis and tracer study data to prepare graduates for work. The findings indicate that the planning stage has served as an initial foundation for improving school quality based on data.

Implementation Stage (Do)

During the implementation stage, schools execute work programs according to established strategic plans. The school principal manages resources and provides guidance to educators and

staff through monitoring and data-based decision-making using the Education Report. Program implementation occurs in stages, adjusted to the school's conditions and resources. In the curriculum field, deputy principals conduct scheduled learning supervision and support teachers to enhance the quality of teaching and learning. Schools implement partnerships with businesses, industries, and universities according to cooperation agreements. Standard operating procedures are applied to create a safe and conducive learning environment. In student affairs, facilities and infrastructure, and industry relations, schools systematically implement rules, extracurricular activities, student discipline guidance, and counseling services. Schools manage practice facilities and information technology in stages to support learning and administration. The implementation of industrial work practices, job fairs, and internships for teachers and students is based on graduate tracer studies.

Evaluation Stage (Check)

Research findings show that schools conduct systematic evaluations of work programs through management meetings, supervision, and reviews of reports from each field. The school principal compares program implementation achievements with set targets, referring to quality indicators in the Education Report. This evaluation is used to map the quality condition of the school and determine focus areas for improvement. In the curriculum field, evaluation involves analyzing academic supervision results to assess the alignment of learning with process standards and teaching materials. Education Report data is utilized to identify strengths and weaknesses in learning. In student affairs, facilities and infrastructure, industry relations, and administration, schools evaluate rules, counseling services, facility utilization, internship implementation, and administrative data accuracy. This evaluation provides an objective picture of the effectiveness of school program implementation.

Follow-up Stage (Act)

In the follow-up stage, schools establish improvement steps based on evaluation results and Education Report data. The school principal adjusts work programs and internal policies through management meetings, prioritizing programs that have not met quality targets. Follow-up actions are determined realistically according to the school's capacity and resources. In the curriculum field, deputy principals follow up on evaluation results by refining teaching materials, strengthening academic supervision, and supporting teachers. In student affairs, facilities and infrastructure, industry relations, and administration, schools strengthen rules, optimize facilities, refine internships, and enhance administrative service quality. Overall, the follow-up stage indicates

ongoing, planned, and data-based improvement efforts in school quality management.

Discussion

Theoretical Dialogue with Primary Sources

The findings of this study demonstrate that the implementation of school management through the Education Report, structured according to the Deming Cycle, produces differentiated institutional outcomes across vocational secondary schools. From the perspective of quality management theory, this variation confirms the central thesis advanced by W. Edwards Deming, who conceptualized improvement as a systemic, cyclical, and leadership-driven process rather than a set of isolated administrative procedures (Deming, 2018). In Deming's formulation, the Plan-Do-Check-Act cycle represents a dynamic epistemology of organizational learning in which evidence, reflection, and corrective action form an integrated system of continuous improvement (Deming, 2018)

The relatively comprehensive implementation observed at SMKN 1 Pungging indicates that the PDCA cycle has been internalized as a governance philosophy. Planning is grounded in measurable indicators derived from the Education Report, implementation follows clearly defined priorities, evaluation functions as structured feedback, and corrective measures are reintegrated into subsequent planning. Such practice reflects reflective educational management, which positions evaluative data as the basis of institutional decision-making rather than as a compliance artifact (Supriyadi, 2020). Moreover, effective educational management requires the integration of supervision, evaluation, and improvement within a coherent and sustainable system, thereby preventing fragmentation between planning and action (E Mulyasa, 2017).

In contrast, the partial institutionalization of the "Check" and "Act" stages at SMKN 1 Trowulan and SMK NU Ma'arif Jatirejo reveals a theoretical disjunction between structural adoption and philosophical internalization. While planning and implementation stages formally align with Data-Based Planning policies, inconsistencies in evaluation and follow-up weaken the feedback loop that sustains organizational learning (Deming, 2018). This condition suggests that the presence of performance indicators and reporting mechanisms does not automatically generate improvement unless embedded within a reflective culture of accountability (Kementerian Pendidikan, Kebudayaan, Riset, 2024).

Leadership further clarifies this divergence. Deming explicitly locates responsibility for quality transformation in top management, arguing that systemic change depends on leadership

commitment rather than technical compliance (Deming, 2018). The stronger strategic engagement demonstrated by the principal of SMKN 1 Pungging illustrates how leadership capacity mediates the relationship between data availability and institutional reform. Empirical evidence supports the assertion that principal performance and organizational climate significantly influence school quality improvement (Putra Prisma Lestari, 2018; Ramadhan, A., & Purnomo, 2024). Therefore, the effectiveness of the Education Report as a policy instrument is contingent upon leadership vision and data literacy rather than upon regulatory mandates alone. Methodologically, the qualitative design adopted in this study enables contextual interpretation of institutional dynamics and captures organizational processes that cannot be fully represented through quantitative indicators (Fadli, 2021; Sugiyono, 2022). The application of triangulation strengthens the credibility of the findings and enhances analytical rigor (Nurlina et al., 2021). Furthermore, interpretative inquiry contributes to ongoing scholarly discourse that recognizes the importance of qualitative evidence in informing educational policy and institutional reform strategies (Taylor, M., Garner, P., & Oliver, 2024).

Juxtaposition with Relevant Empirical Studies

When positioned within existing empirical literature, the findings align with research emphasizing the centrality of organizational culture and data literacy in determining the success of quality management frameworks in educational settings (Aggarwal, 2020). Prior studies indicate that performance-reporting instruments require systematic documentation and structured follow-up mechanisms to transform information into actionable improvement (HERFIYANTI et al., 2024; Indartik & Kuncahyono, 2025). The inconsistent feedback mechanisms identified in two of the schools reinforce the conclusion that data without reflective practice remains informational rather than transformational. In the curriculum domain, compliance with national standards such as those issued by BSNP reflects structural alignment. However, curriculum planning achieves substantive impact only when it becomes adaptive and evidence-based, responding to evolving educational demands (Silitonga, E. P. S., Purba, J., & Turnip, 2022). The consistent supervisory practices observed at SMKN 1 Pungging substantiate findings that PDCA-based instructional evaluation enhances pedagogical quality when evaluative results inform professional development and instructional redesign (Hafid, 2025).

From a vocational perspective, stronger industry collaboration at SMKN 1 Pungging corresponds with studies demonstrating that tracer studies, industry partnerships, and

infrastructure alignment contribute significantly to graduate employability (Purnama Sari, 2023; Silviani et al., 2024). Considering persistent challenges in vocational graduate absorption, institutional responsiveness to labor market dynamics becomes a strategic imperative rather than an auxiliary initiative (Badan Pusat Statistik, 2023). Conversely, infrastructural and resource limitations at SMKN 1 Trowulan and SMK NU Ma'arif Jatirejo reflect structural constraints that have been identified as barriers to quality reform in vocational education (D. Agustian et al., 2024). In administrative management, the integration of school information systems at SMKN 1 Pungging corroborates evidence that management information systems enhance institutional transparency, efficiency, and accountability when supported by strategic leadership and organizational readiness (I. Agustian, 2019; Siswanto & Fatimah, 2024). However, the limited technological infrastructure and human resource capacity observed in the other schools indicate that digital systems alone cannot substitute for institutional competence. This finding resonates with arguments that policy innovations such as Emancipated Learning require not only regulatory frameworks but also professional capacity and adaptive governance structures (Efyanto Dwi, 2021).

Author's Critical Reflection and Antithesis

Although theoretical and empirical literature largely endorses the integration of the Deming cycle and data-based planning in education, this study advances a critical interpretation. The primary challenge does not lie in the absence of policy instruments or performance indicators but in the tendency to operationalize quality management as a compliance-oriented exercise. When the "Check" and "Act" stages are inconsistently implemented, structured reforms risk degenerating into bureaucratic formalities rather than catalyzing cultural transformation (Ariza Fadly Himawan, 2024).

From the author's perspective, sustainable quality improvement in vocational education requires a paradigmatic shift from administrative rationality toward reflective organizational culture. The Education Report possesses significant transformative potential; however, without leadership accountability, data literacy, and systemic reflection, it may be reduced to an archival document. Superficial initiatives that emphasize documentation without fostering institutional learning contradict the philosophical foundations of continuous improvement articulated by Deming (Deming, 2018).

Therefore, the contribution of this study lies in demonstrating that the effectiveness of Education Report-based management depends on the internalization of quality as a cultural value

rather than as a procedural obligation. The Deming cycle must be interpreted as a governance philosophy that integrates leadership, evidence, reflection, and adaptive action. In the absence of such integration, policy reforms will remain symbolic. In its presence, however, vocational schools can cultivate resilient systems of continuous improvement capable of responding to educational, technological, and labor market transformations in a sustainable manner.

CONCLUSION

This study concludes that the effectiveness of school management based on the Education Report, using the Deming Cycle, varies according to the consistency of quality data utilization across the Plan, Do, Check, and Act stages. SMKN 1 Pungging applies the Deming Cycle comprehensively, enabling data-driven decision making and continuous quality improvement, whereas SMKN 1 Trowulan and SMK NU Ma'arif Jatirejo still experience constraints in the evaluation and follow-up processes. These results indicate that the Education Report serves as an effective tool for school quality control. This is particularly true when it is systematically integrated into management practices and supported by strong leadership and adequate data literacy among school stakeholders.

REFERENCES

- Aggarwal, A. K. (2020). Using Deming's Cycle for Improvement in A Course: A Case Study. *International Journal of Web-Based Learning and Teaching Technologies*, 15(3). <https://doi.org/10.4018/IJWLTT.2020070103>.
- Agustian, D., Amarta, A., & Wardoyo, S. (2024). Tantangan Pendidikan Vokasional dalam Meningkatkan Penyerapan Lulusan SMK di Dunia Industri. *Jurnal Studi Guru dan Pembelajaran*, 7(3), 1373–1382. <https://doi.org/10.30605/jsgp.7.3.2024.5016>
- Agustian, I. (2019). Pengaruh Sistem Informasi Manajemen terhadap Peningkatan Kualitas Pelayanan Di Pt.Jasaraharja Putra Cabang Bengkulu. *Jurnal Professional FIS UNIVED*, 6, 19.
- Aini, F., Adawiyah, L. R., Yolanda, R., Sebayang, S. E., Asna, A., Islam, U., Sumatera, N., & Belajar, T. (n.d.). *Inklusi: Jurnal Pendidikan Islam dan Filsafat Yayasan Salmiah Education Global International (YSEGI)*. 1–12.
- Ariza Fadly Himawan, T. H. (2024). Manajemen sekolah dalam meningkatkan Mutu Pendidikan di SMKN 1 Sedan. *Indonesian Research Journal on Education*.
- AW Astuti, A Azainil, W. W. (2025). Analisis Rapor Pendidikan sebagai Dasar Penyusunan Perencanaan Berbasis Data dalam Meningkatkan Mutu Pendidikan Sekolah Dasar Negeri di Bontang Selatan. *Jurnal Manajemen Pendidikan*, 6, 2025.
- Bachri, B. S. (2012). Menyakinkan Validitas Data melalui Triangulasi pada Penelitian Kualitatif. <Http://Yusuf.Staff.Ub.Ac.Id/Files/2012/11/Meyakinkan-Validitas-Data-Melalui-Triangulasi-Pada-Penelitian-Kualitatif.Pdf>.
- Badan Pusat Statistik. (2023). *Statistik Pendidikan 2022*. Jakarta: BPS.
- Badan Standar Nasional Pendidikan. (2020). *Laporan Tahunan BNSP*.

- Baswedan, A. R., Suyata, P., Nanda, W., & Saputra, E. (2025). *Entrepreneurship Education in Vocational Schools : An Indonesian Model*. 14(1). <https://doi.org/10.11591/ijere.v14i1.32317>
- Deming, W. E. (2018). *Out of the Crisis*. MA: MIT Press.
- E Mulyasa. (2017). *Manajemen Berbasis Sekolah: Konsep, Strategi dan Implementasi*. Remaja Rosdakarya.
- Efyanto Dwi. (2021). *Analisis Penerapan Kebijakan Merdeka Belajar pada Kurikulum SMK*. Universitas Muhammadiyah Malang.
- Enong Holilah, Siti Maesyaroh, C. A. (2024). Penggunaan Rapor Pendidikan untuk Meningkatkan Akuntabilitas Manajemen Sekolah Dasar. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 09.
- Fadli, M. R. (2021). Memahami desain Metode Penelitian Kualitatif. *Humanika*, 21(1), 33–54. <https://doi.org/10.21831/hum.v21i1.38075>
- Hafid, I. K. A. (2025). *Peningkatan Kompetensi Kejuruan Melalui Integrasi Kurikulum Industri di Pendidikan Vokasi : Tinjauan Literatur*. 4(2), 196–207.
- Hendra, A. H., Tanwir, N. Hayati, S., L., S. N., Prakasa, Y. F., Hasibuan, R. P. A., & Asyhar, A. D. A. (2023). *Media Pembelajaran Berbasis Digital (Teori & Praktik)*. In PT. Sonpedia Publishing Indonesia (Nomor 1).
- Herfiyanti, N., Setiyanti, W., & Wulandari, A. (2024). Peningkatan Mutu Sekolah dengan Perencanaan Berbasis Data Rapor Pendidikan. *Learning : Jurnal Inovasi Penelitian Pendidikan dan Pembelajaran*, 4(3), 508–512. <https://doi.org/10.51878/learning.v4i3.3149>
- Inayatul, T., R. P., & Murtadho, A. (2025). Strategi Pendidikan Berkualitas Melalui Total Quality. *Pendidikan, Jurnal Manajemen*, 13(01), 9–16.
- Indartik, E., & Kuncahyono. (2025). *Optimalisasi Rapor Pendidikan Berbasis Siklus Deming di SMKN Trowulan*. 4(2), 12154–12163.
- Kemdikbudristek. (2022). *Buku Saku Rapor pendidikan Indonesia*. Kementerian Pendidikan dan Kebudayaan Riset dan Teknologi, 50.
- Kemendikbudristek. (2023). *Rapor Pendidikan Tahun 2023*. Pusat Data dan Teknologi Informasi (Pusdatin), Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.
- Kementerian Pendidikan, Kebudayaan, Riset, dan T. (2022). *Peraturan Menteri Pendidikan, Kebudayaan, Riset, dan Teknologi Nomor 5 Tahun 2022 tentang Standar Kompetensi Lulusan pada PAUD, Pendidikan Dasar, dan Pendidikan Menengah*. Jakarta: Kemendikbudristek. Retrieved from *Permendikbudristek No. 5 Tahun 2022*.
- Kementerian Pendidikan, Kebudayaan, Riset, dan T. (2024). *Indikator Rapor Pendidikan untuk Satuan Pendidikan Dasar dan Menengah (Dasmen dan SMK)*. Pusat Informasi Rapor Pendidikan, Kemendikbudristek. Diakses dari <https://pusatinformasi.raporpendidikan.kemdikbud.go.id>.
- Kementerian Pendidikan dan Kebudayaan. (2016). *Permendikbud No. 28 Tahun 2016 Tentang Standar Penilaian Pendidikan*.
- Mujiyanto, G., Wibowo, A. P., Tinus, A., & Setiawan, A. (2025). *Meningkatkan Kompetensi Guru melalui Pelatihan dan Pendampingan Implementasi Kurikulum Merdeka di Sekolah Menengah Pertama Muhammadiyah 1 Sumber Pucung*. 5(1), 943–952.
- Nurlina, N., Nurfaidah, N., & Bahri, A. (2021). *Teori Belajar dan Pembelajaran*. In LPP Unismuh Makassar (Lembaga Perpustakaan dan Penerbitan Universitas Muhammadiyah Makassar) (Nomor April).
- Pendidikan, D. (2023). *Laporan tahunan pendidikan Kabupaten Mojokerto*. In Dinas Pendidikan Kabupaten Mojokerto.
- Poerwanti, E., Suwandayani, B. I., & Sombuling, A. (2021). *Literacy Skills as an Effort to Maintain Quality Culture in Muhammadiyah Elementary Schools in Malang City During the Covid-19*

Pandemic. 7(1), 8–13.

- Prabowo, S. A., Supriyadi, S., & Setiawan, D. (2024). *Development of Internship Program Evaluation Instruments for Vocational High Schools (SMK) at Patra Semarang Hotel & Convention in 2024*. 4, 1–10.
- Purnama sari. (2023). Implementasi Kolaborasi Sekolah dan Industri dalam Pendidikan Vokasi di Indonesia. *Jurnal Pendidikan dan Kebudayaan (JURDIKBUD)*, 8(2), 101–115.
- Putra Prisma Lestari, N. Z. (2018). *Pengaruh Kinerja Kepala Sekolah dan Iklim Kerja Guru terhadap Kinerja Guru Teknik Kendaraan*. 6.
- Rahman. (2020). Penerapan Siklus Deming dalam Peningkatan Mutu Pendidikan di Sekolah". *Jurnal Pendidikan dan Pembelajaran*, 23(3), 45–58.
- Ramadhan, A., & Purnomo, A. (2024). Pengaruh Motivasi dan Lingkungan Kerja terhadap Kinerja Guru Produktif pada Sekolah Menengah Kejuruan (SMK) di Kota Bandung. *Jurnal Pendidikan Manajemen (JPM) Volume & Nomor: Vol. 9, No. 1*.
- Restian, A. (2019). *Pendidikan Karakter di Auckland University*. 7(2), 122–132.
- Rofiqoh Dwisusanti, M. (2025). Siklus TQM dalam Pendidikan: Planning, Do, Check, Act dalam Dunia Pendidikan, Prinsip Kaizen Pada TQM. *Jurnal Inovasi Manajemen dan Supervisi Pendidikan*, 5(2).
- Sari, L. (2022). Evaluasi Proses Pembelajaran di SMK Menggunakan Pendekatan Siklus Deming. *Jurnal Pendidikan dan Evaluasi*, 11(1), 12–25.
- Silitonga, E. P. S., Purba, J., & Turnip, H. (2022). Paradigma dan Perencanaan Kurikulum. *Jurnal Pendidikan Sosial dan Humaniora*, 2(1), 147–155.
- Silviani, A., Marisan, S., Yoseptry, R., Noer, N. Z. S., & Ratnawulan, T. (2024). Implementasi Manajemen Strategik dalam Meningkatkan Mutu Pendidikan di SMK YP79 Majalaya, Kabupaten Bandung. *Jurnal Pendidikan dan Kewirausahaan*, 12(1), 378–394. <https://doi.org/10.47668/pkwu.v12i1.1173>
- Sinaga, A. V. (2023). Peranan Teknologi dalam Pembelajaran untuk Membentuk Karakter dan Skill Peserta Didik Abad 21. *Journal on Education*, 06(01), 2836–2846.
- Siswanto, D. H., & Fatimah, N. (2024). *Pendekatan Pengelolaan Keuangan Sekolah Menengah Atas dalam Upaya Meningkatkan Mutu Pendidikan*. 21(1), 54–60.
- Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* (2nd ed.). CV Alfabeta.
- Supriyadi, A. (2020). *Prinsip-prinsip Manajemen Pendidikan*. Yogyakarta: Pustaka Pelajar.
- Taylor, M., Garner, P., & Oliver, S. (2024). Use of Qualitative Research in World Health Organization guidelines: A document analysis. *Health Research Policy and Systems*. *Health Research Policy and Systems*, <https://doi.org/10.1186/s12961-024-01070-5>, 22(1), 44.
- Trisnantari, H. E., & Jannah, S. R. (2025). Implementation of The Deming Cycle in the School. *Arrosikhun: Jurnal Manajemen Pendidikan Islam*, 04(03), 388–400.