JURNAL PENDIDIKAN IPS
https://doi.org/10.37630/jpi.v15i2.3019
Vol.15 No.2, Juni 2025 | ISSN: 2088-0308 | e-ISSN: 2685-0141

Strategies for Educational Quality Management in the Digital Transformation Era: A Case Study of SMP PGRI 1 Semarang

Strategi Pengelolaan Mutu Pendidikan di Era Transformasi Digital: Studi Kasus SMP PGRI 1 Semarang

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ABSTRACT

The digital transformation era requires schools to adapt their approaches to quality management. However, many schools have not yet optimized the use of data for informed decision-making, particularly in utilizing platforms such as the Education Report (*Rapor Pendidikan*). This indicates a gap between the availability of digital data and its practical application in school-level quality management. This study aims to analyze educational quality management strategies at SMP PGRI 1 Semarang through the implementation of the Education Report in the digital era. A qualitative approach with a case study method was employed. Data were collected through in-depth interviews with eight key informants, direct observations, and document analysis conducted between January and May 2025. The findings reveal that the use of the Education Report improves transparency, accountability, and the effectiveness of quality management. The platform provides comprehensive data on students' literacy, numeracy, and character development, enabling more targeted evaluations and planning. Most students reached a "Sufficient" level in literacy and numeracy, though the "Critical Thinking" dimension of character development still requires attention. Key challenges include limited IT infrastructure, platform complexity, resistance to change, and insufficient human resource capacity. This study addresses a research gap regarding school-level data-driven quality management practices and recommends strengthening digital capacity, documentation systems, and multi-stakeholder collaboration to enable schools to become adaptive and sustainable models of data-based quality management in the digital age.

Keywords: Education Quality Management; Rapor Pendidikan; Digital Transformation

ABSTRAK

Transformasi digital menuntut sekolah beradaptasi dalam pengelolaan mutu pendidikan. Namun, banyak sekolah belum optimal memanfaatkan data sebagai dasar pengambilan keputusan, terutama dalam menggunakan platform seperti Rapor Pendidikan. Hal ini menunjukkan adanya kesenjangan antara ketersediaan data digital dan penerapannya dalam manajemen mutu di tingkat sekolah. Penelitian ini bertujuan untuk menganalisis strategi pengelolaan mutu pendidikan di SMP PGRI 1 Semarang melalui implementasi Rapor Pendidikan di era digital. Pendekatan penelitian yang digunakan adalah kualitatif dengan metode studi kasus. Data diperoleh melalui wawancara mendalam dengan 8 informan, observasi, dan dokumentasi pada Januari–Mei 2025. Hasil penelitian menunjukkan bahwa penggunaan Rapor Pendidikan meningkatkan transparansi, akuntabilitas, dan efektivitas pengelolaan mutu. Data capaian literasi, numerasi, dan karakter siswa dimanfaatkan untuk evaluasi dan perencanaan program yang tepat sasaran. Sebagian besar siswa berada pada level "Cukup" dalam literasi dan numerasi, namun aspek "Bernalar Kritis" masih perlu ditingkatkan. Tantangan utama meliputi keterbatasan infrastruktur, resistensi perubahan, dan kapasitas SDM. Penelitian ini mengisi kekosongan studi terkait praktik manajemen mutu berbasis data di sekolah menengah, serta merekomendasikan penguatan kapasitas digital dan kolaborasi lintas pihak agar sekolah mampu menjadi model pengelolaan mutu adaptif di era digital.

Kata Kunci: Manajemen Mutu Pendidikan; Education Report; Transformasi Digital

INTRODUCTION

Quality education serves as the primary foundation for building excellent human resources capable of competing in the era of globalization. Quality education does not only emphasize intellectual aspects, but also

ISSN: 2088-0308 | e-ISSN: 2685-0141
https://doi.org/10.37630/jpi.v15i2.3019

shapes students' character, competencies, and international competitiveness. In the context of modern educational management, quality is the main indicator of the effectiveness and efficiency of educational implementation, as mandated in Law Number 20 of 2003 concerning the National Education System. Previous research confirms that educational quality is the result of a systematic and continuous process involving all stakeholders, including the government, schools, teachers, students, and the wider community (Asrohah, 2015; Utami, 2018; Puspita & Andriani, 2022).

The concept of educational quality has undergone paradigmatic evolution in recent decades. Sallis (2023) states that educational quality encompasses all activities systematically designed to ensure that educational inputs, processes, and outputs meet the standards expected by all stakeholders. Sagala (2020) adds that educational quality is the achievement of standards comprehensively, covering managerial, pedagogical, educator professionalism, and active community participation in the educational process. This definition implies that educational quality is a multidimensional construct requiring a holistic approach in its management.

In today's digital and globalized era, quality education has become a strategic necessity in facing the challenges of the Industrial Revolution 4.0 and digital transformation, which fundamentally alter the educational landscape. Education is now required to be not only locally relevant but also globally competitive. This demands that educational quality management be carried out professionally, adaptively, data-driven, and participatively, involving all stakeholders: school principals, teachers, students, parents, and the government (Nur, 2010; Badrudin, 2024; Mardan, 2017).

Numerous studies emphasize the importance of adaptive and data-driven educational management in improving educational quality. Musakirawati (2023), in her research at SMP Al Furqon and SMP Asy Syafaah in Jember Regency, states that data-based planning (DBP) is a process of systematically collecting and analyzing data as the basis for designing more targeted and evidence-based policies and programs. The Education Report (Rapor Pendidikan) serves as an important evaluation tool that provides valid data to support planning for educational service improvement. Through the Education Report, schools can analyze five main dimensions: learning outcomes, equity, learning quality, educator competency, and school management, which serve as benchmarks for achieving the Minimum Service Standards (SPM).

However, various studies and official reports such as the 2024 National Education Report indicate that the quality of education in Indonesia still faces serious and complex challenges. In many regions, including urban areas, significant disparities remain among educational institutions in terms of literacy and numeracy achievement, conducive school climate, and effective learning quality (Yasmansyah et al., 2022; Shobri et al., 2020; Ansori, 2021). This situation shows that the planning and implementation of quality management are not yet fully integrated and based on accurate and comprehensive data.

Ideally, educational quality achievement should reflect the fulfillment of national education standards, which consist of eight main standards: content, process, graduate competency, educators and educational staff, facilities and infrastructure, management, financing, and assessment. Goetsch and Davis (2006), in their study on predictors of educational quality, state that the simultaneous fulfillment of national education standards significantly influences school quality, although only five standards have a positive impact: content, graduate competency, educators and educational staff, facilities and infrastructure, and management. High-quality schools ideally produce high output from low input, create added value from educational inputs, exceed expectations in the learning process, and produce output that surpasses established standards. Moreover, high-quality schools also cultivate a positive, transparent, and participatory school culture (Utami, 2018; Puspita & Andriani, 2022). According to Saepul Ma'mun (2015), high-quality schools must be able to formulate quality policies in the form of vision, mission, goals, and achievement strategies that are internalized by all school members. Strong leadership, diverse curricular and extracurricular programs, and synergy with various parties are the main keys to achieving educational quality.

In the context of strategic management in the digital era, schools that successfully improve educational quality generally apply approaches that are responsive and adaptive to technological developments. Many studies indicate that the application of responsive and adaptive strategic management can help schools face challenges and seize existing opportunities. Recommendations for future educational practices include the development of a curriculum integrated with technology and increased collaboration between schools, parents, and the community (Badrudin, 2024; Mardan Umar, 2017).

ISSN: 2088-0308 | e-ISSN: 2685-0141
https://doi.org/10.37630/jpi.v15i2.3019

However, the reality in the field shows that educational quality achievements in schools are still far from ideal. Research results in various regions of Indonesia indicate that many schools still face serious challenges in improving educational quality. The main challenges include limited educational infrastructure and facilities, uneven teacher quality and competency, and limited funding and human resources (Yasmansyah et al., 2022; Shobri et al., 2020; Ansori, 2021).

Yasmansyah et al. (2022), in their research on efforts to improve educational quality in the digital era, emphasize that enhancing the quality of education in the digital era plays a key role in shaping the future of the next generation. However, in facing existing challenges and obstacles, continuous efforts are needed to improve educational quality, such as optimizing the use of technology in learning, improving teacher competency, and strengthening collaboration between schools, parents, and the community (Nur, 2010; Badrudin, 2024).

Other research in Tana Toraja Regency shows that schools at all levels still lack educational facilities and infrastructure, such as school buildings, classrooms, and laboratories that do not meet national education standards. In addition, educators and educational staff are still insufficient, especially in remote areas due to uneven distribution. Educational quality achievements in Indonesia are still low compared to other countries, as reported by OECD (2018), which evaluated the education systems of 72 countries and found that the achievement of junior high school students in reading, mathematics, and science subjects is still low compared to the average scores set by OECD (Ansori, 2021). Other inhibiting factors commonly found in schools are low student motivation, insufficient numbers of educators and educational staff, and limited school funding (Shobri et al., 2020; Yasmansyah et al., 2022).

In facing these challenges, the role of quality management and data-based evaluation is very important. Data-based planning is a systematic approach in educational management that utilizes accurate and relevant data to support decision-making. Research by Janacitta (2025) shows that data-based planning can help identify educational problems, allocate resources effectively, and increase transparency and accountability in educational management. Thus, data-based planning is an effective strategy for sustainably improving educational quality (Mardan Umar, 2017; Badrudin, 2024).

The Education Report (Rapor Pendidikan) as the latest evaluation instrument emphasizes an orientation toward educational quality through a more comprehensive and integrated system. This platform presents data on the quality of educational institutions based on national assessment and survey results, enabling institutions to systematically identify problems, conduct in-depth reflection on root causes, and design targeted and sustainable improvement strategies. Mulyasa (2023) strengthens this argument by emphasizing that the success of education depends on effective and systematic management, including mature strategic planning, meaningful and contextual learning implementation, and objective and constructive evaluation.

The achievements of the Education Report for junior high schools in the narrower context of Semarang City reflect the dynamics of educational quality at the local level.

Certainly. Here is the academic English translation of the text you provided, including the context from Table 1 and the detailed discussion on educational quality management. This can be seen in table 1 below.

Table 1. Semarang City Junior High School (SMP) Education Report Results for 2023 and 2024

Indicator	2023 Achievement	2024 Achievement	Change
SMP Literacy Score	89.14	90.45	+1.31
SMP Numeracy Score	61.35	84.29	+22.94
SMP Safety Climate	69.40	72.29	+2.89
SMP Diversity Climate	69.90	76.95	+7.05
SMP Inclusivity Climate	56.75	60.06	+3.31
Semarang City SPM Index	83.66	84.12	+0.46

Source: *https://raporpendidikan.dikdasmen.go.id/login*

The results of the Education Report for junior high schools in Semarang City indicate improvements in nearly all indicators, although certain aspects still require more serious attention. The literacy score has increased only slightly, from 89.14 to 90.45, indicating the need to strengthen literacy programs to achieve more significant improvements in students' reading and text comprehension skills. Meanwhile, although the numeracy score has risen sharply from 61.35 to 84.29, continuous evaluation is necessary to ensure that this achievement is truly equitable across all junior high schools and not limited to only a few. The safety climate in junior high schools

ISSN: 2088-0308 | e-ISSN: 2685-0141
https://doi.org/10.37630/jpi.v15i2.3019

has increased moderately (+2.89), and the diversity climate has improved quite well (+7.05). However, the inclusivity climate, although it has improved from 56.75 to 60.06, remains the lowest indicator. This suggests that services and acceptance for children with special needs and students from diverse backgrounds must be further optimized, for example, through enhanced teacher competencies in inclusive learning and the provision of more adequate facilities. On the other hand, the increase in the Semarang City Minimum Service Standard (SPM) Index is only slight (+0.46), necessitating comprehensive improvements in educational services to ensure that minimum service standards are truly met and directly impact the quality of classroom learning. By focusing on improving literacy, ensuring equitable numeracy achievement, enhancing the inclusivity climate, and accelerating the fulfillment of SPM, it is hoped that the quality of junior high school education in Semarang City will become more equitable and sustainable in the future.

Effective educational quality management also requires the active participation of all stakeholders, including school committees. As the frontline evaluators of educational quality, school committees play an active role in monitoring curriculum implementation, ensuring budget transparency, and providing feedback on student learning achievements. Synergy between the school and the committee has successfully increased educational accountability and transparency, resulting in many schools experiencing a surge in community satisfaction indices and improved student achievement over the past two years (Utami, 2018; Puspita & Andriani, 2022; Asrohah, 2015).

Educational quality is a multidimensional concept whose meaning has evolved alongside global educational paradigms. According to Sallis (2023), educational quality is defined as the totality of characteristics and performance of an education system that meets or exceeds the expectations and needs of all stakeholders, including students, parents, teachers, the community, and the workforce. This definition emphasizes that educational quality is not merely the achievement of minimum standards, but the ability of the education system to provide sustainable added value. Crosby's theory of "Quality is Free," adapted to the educational context by Arcaro (2020), explains that educational quality should be understood as "conformance to requirements," or compliance with established standards. In the Indonesian educational context, these requirements are specified through the National Education Standards (SNP), which consist of eight standards: graduate competency, content, process, educators and educational staff, facilities and infrastructure, management, financing, and educational assessment.

According to Garvin (2024), the characteristics of high-quality education include: (1) Performance—measurable through student learning outcomes; (2) Features—unique programs or features that distinguish one institution from another; (3) Reliability—consistency in providing educational services; (4) Conformance—compliance with established standards; (5) Durability—the lasting impact of education on students; (6) Serviceability—accessibility and responsiveness to needs; (7) Aesthetics—a conducive learning environment; and (8) Perceived Quality—stakeholders' perceptions of quality. Educational quality encompasses various interrelated dimensions. Sagala (2020) identifies five main dimensions of educational quality: input, process, output, outcome, and context. The input dimension includes all resources that enter the educational process, such as student quality, teacher competence, educational staff qualifications, availability of facilities and infrastructure, relevant curriculum, and funding support. The process dimension is the core of educational implementation, encompassing classroom learning quality, curriculum implementation, effective classroom management, innovative teaching methods and media, comprehensive assessment systems, and a school culture conducive to learning. The output dimension refers to the direct results of the learning process, including students' academic competency achievements, character and value development, 21st-century skills, and graduation and continuation rates to higher education levels. The outcome dimension is the long-term impact of education on individuals and society, including graduates' adaptability in further education or the workforce, contributions to community development, and impacts on quality of life. The context dimension includes environmental factors that influence educational implementation, such as government policy, community support, socio-economic conditions, geography, and local culture (Sagala, 2020).

Quality management in education is a systematic approach to ensuring that all aspects of educational implementation meet established quality standards. Deming (2023), in his theory of Total Quality Management (TQM) adapted for education, outlines 14 basic principles that can be applied in educational quality management. These principles include a focus on customers, strong leadership, the involvement of all school members, a process approach, an integrated system, strategic and systematic approaches, continuous

ISSN: 2088-0308 | e-ISSN: 2685-0141
https://doi.org/10.37630/jpi.v15i2.3019

improvement, and data-driven decision-making. The educational quality management cycle adopts the Plan-Do-Check-Act (PDCA) concept developed by Shewhart and popularized by Deming (2023). In the educational context, this cycle can be described as follows: Plan (planning), Do (implementation), Check (evaluation), and Act (improvement).

In the digital era, education faces new challenges that require innovation and adaptation. Pratiwi et al. (2025) state that internet-connected education can create more effective and efficient learning, as well as support communication and collaboration between schools, other educational institutions, and the business world. Digitalization of education also supports School-Based Management Information Systems (MBS), which can be used for classroom management, monitoring, evaluation, reporting, and strategic policy-making (Pratiwi et al., 2025). The implementation of information and communication technology (ICT) in education not only improves the learning process but also empowers human resources and increases the global competitiveness of schools (Pratiwi et al., 2025).

Asmarinnda (2023) adds that education in the digital era requires special efforts to improve educational quality, such as the use of digital learning platforms, curriculum integration with technology, teacher training, and the development of learning materials that are relevant to contemporary needs. The digital era has a significant impact on education but also presents challenges such as the digital divide and infrastructure limitations. Therefore, special efforts are needed to optimize the use of technology in learning and to address various emerging challenges (Asmarinnda, 2023).

Data-based planning (DBP) is a systematic approach in educational management that utilizes accurate and relevant data to support decision-making. Janacitta (2025) shows that data-based planning can help identify educational problems, allocate resources effectively, and increase transparency and accountability in educational management. Thus, data-based planning is an effective strategy for sustainably improving educational quality (Janacitta, 2025). The Education Report is a digital platform developed by the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) as an enhancement of the National Examination reporting system. According to the Technical Guide for the Education Report (2024), this platform is defined as an information system that presents data on educational quality as the basis for analysis, planning, and follow-up for improving educational quality at the school and regional levels. The main purpose of the Education Report is to provide comprehensive data, facilitate independent analysis, support data-based planning, and increase the accountability of educational implementation to the public.

The main components of the Education Report include: education profiles, learning achievements, character indices, safety and inclusivity climates, diversity climate, and gender equality climate. The measurement methodology in the Education Report uses the Minimum Competency Assessment (AKM) for literacy and numeracy, character surveys for the Pancasila Student Profile, and learning environment surveys to collect perceptions from various stakeholders (Technical Guide for the Education Report, 2024).

School-Based Management (SBM) is a new paradigm in educational management that gives schools greater autonomy to make decisions about resource management to improve educational quality. Mulyasa (2023) defines SBM as a management model that gives schools greater autonomy, provides flexibility, and encourages direct participation by school members and the community to improve school quality based on national education policy. The SBM concept is based on decentralization theory, which believes that the best decisions are made by those closest to the local situation. The principles of SBM include: school autonomy, community participation, accountability, transparency, strong leadership, and teamwork. The main components of SBM include school management, effective learning, and community participation (Mulyasa, 2023).

The Education Report plays a strategic role in every stage of the educational quality management cycle. In the planning stage, the Education Report provides accurate baseline data on school conditions, enabling the identification of priority issues, the setting of realistic targets, and evidence-based program planning. In the implementation stage, Education Report data can be used for monitoring progress, early identification of implementation problems, and strategy adjustments. In the evaluation stage, the platform provides data to measure target achievement, evaluate program effectiveness, and compare performance with other schools or national standards. In the improvement stage, the results of the Education Report analysis become the basis for designing more focused and targeted improvement programs (Technical Guide for the Education Report, 2024).

ISSN: 2088-0308 | e-ISSN: 2685-0141
https://doi.org/10.37630/jpi.v15i2.3019

The strengths of the Education Report in quality management include comprehensive data, ease of access and interpretation, benchmarking, and the ability to conduct historical and trend analysis (Technical Guide for the Education Report, 2024). Research by Yati, Kurniawan, & Asbari (2023) shows that the Education Report can be the main instrument for educational quality management in the digital era, as it is able to provide accurate and relevant data for strategic decision-making (Yati, Kurniawan, & Asbari, 2023).

In the global context, UNESCO, through the Global Education Agenda 2030 and Sustainable Development Goal 4 (SDG 4), continues to encourage educational innovation that emphasizes the importance of access to information, creativity, and competitiveness (Pratiwi et al., 2025). Digital-based education enables the creation of various innovative learning methods and approaches, such as flipped classrooms, blended learning, and so on. These approaches can provide students with a more interactive and engaging learning experience (Asmarinnda, 2023).

SMP PGRI 1 Semarang, as one of the junior high schools in Semarang City, faces its own challenges in implementing data-based educational quality management. The school has demonstrated a commitment to developing innovative and transformative programs, including the Pancasila Student Profile Strengthening Project (P5), as well as dedication to the holistic formation of student character. However, the implementation of new evaluation and quality management systems requires in-depth study to understand the effectiveness of strategies and the challenges faced in the field. Based on this background, this study aims to analyze the implementation of the Education Report in educational quality management at SMP PGRI 1 Semarang, identify the challenges and obstacles encountered, and formulate strategies to optimize the use of the Education Report for sustainable educational quality improvement. It is hoped that this research will contribute to the development of educational quality management theory and data-based management practices at the school level.

METHOD

This study employs a qualitative approach with a case study method. The qualitative approach was chosen to gain an in-depth understanding of the strategies for managing educational quality at SMP PGRI 1 Semarang, particularly in the context of implementing the Education Report (*Rapor Pendidikan*) during the digital transformation era. The case study method enables researchers to holistically and contextually explore complex phenomena, producing a comprehensive depiction of the processes and dynamics at the research site (Yin, 2018; Rangkuti, 2016).

The research was conducted at SMP PGRI 1 Semarang during the second semester of the 2024/2025 academic year. This site was selected purposively, based on its active and consistent implementation of the Education Report as a quality evaluation tool and its commitment to data-based quality management. Participants in this study consisted of eight individuals, including the principal, four teachers, one member of the school committee, and two administrative or management staff. Participants were selected using purposive sampling, based on their direct involvement in the planning, implementation, and evaluation of quality management at the school (Sugiyono, 2021).

Data were collected using three techniques: in-depth interviews, participatory observation, and document analysis. In-depth interviews were conducted to explore participants' perspectives, experiences, and strategies related to the use of the Education Report. Observations were carried out to understand actual practices in meetings, training sessions, and monitoring activities related to quality management. Document analysis was conducted by reviewing relevant records, such as the Education Report, school work plans (RKS), quality improvement programs, and performance evaluation reports.

To ensure the credibility and trustworthiness of the data, several strategies were employed. Data source and method triangulation were conducted to validate findings from different perspectives (Ulfatin, 2015). Member checking was used by returning interview transcripts and interpretations to participants for confirmation and clarification. An audit trail was maintained by systematically documenting the research procedures, data collection processes, coding schemes, and analysis steps, ensuring transparency and reproducibility. Peer debriefing was also conducted with fellow researchers to minimize bias and enhance analytical rigor.

ISSN: 2088-0308 | e-ISSN: 2685-0141
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Data analysis followed the interactive model by Miles, Huberman, and Saldana (2020), which includes data reduction, data display, and conclusion drawing and verification. Data were grouped and coded according to the research focus, then presented in narrative and matrix formats to facilitate interpretation. Verification was conducted through constant comparison and triangulation to ensure the validity of the findings.

Ethical considerations were maintained throughout the research. Participants were informed of the study's purpose and gave voluntary consent. Confidentiality was upheld by anonymizing participant identities using initials or codes. All data collected were the result of honest fieldwork and were not manipulated in any way. As emphasized by McMillan and Schumacher (2001), objectivity, accuracy, and integrity are essential for producing credible and beneficial educational research.

RESULT AND DISCUSSION

The implementation of the Education Report at SMP PGRI 1 Semarang has brought significant changes to educational quality management. The school, as one of the reputable private junior high schools in Semarang City, is committed to providing education that is not only oriented towards academic achievement but also the formation of student character based on Pancasila values (Yasmansyah et al., 2022). Its strategic location in the city center allows the school to serve students from various socioeconomic backgrounds, making the challenges of quality management increasingly complex and dynamic (Musakirawati, 2023).

The process of implementing the Education Report began with a socialization phase involving all stakeholders, including the school principal, teachers, the school committee, and parents. The school principal acted as the champion in this transformation process, conducting a series of internal workshops, briefings with the school committee, and intensive communication with parents through various channels (Perawati & Asbari, 2022). Initial challenges, such as resistance to change from some senior teachers accustomed to conventional evaluation systems, were overcome through intensive communication and concrete demonstrations of the benefits of the Education Report platform (Purwanto et al., 2020). A gradual change management strategy, starting with early adopters, proved effective in reducing resistance and building momentum for positive change within the school environment (Novitasari, Prasetyo, & Asbari, 2022).

After the socialization phase, the school management team formed a special team consisting of the school principal, deputy principal for curriculum, guidance and counseling coordinator, and several senior teachers with good digital literacy. This team conducted in-depth exploration of various features and data available in the Education Report platform, including analysis of student learning achievements in literacy and numeracy, student character profiles based on character surveys, and various school climate indicators. This exploration process yielded important insights that had not been identified through the conventional evaluation system (Prasetyo & Asbari, 2023). These findings strengthen the importance of data-driven decision-making in educational quality management, as stated by Janacitta (2025), who asserts that data-based planning can help identify educational problems, allocate resources effectively, and increase transparency and accountability in educational management.

The results of the Education Report data analysis at SMP PGRI 1 Semarang provide a comprehensive picture of the quality of learning and student character. The following is a summary of student literacy, numeracy, and character achievement data in table form. This can be seen in table 2 below.

Table 2. Education Report of SMP PGRI 1 Semarang, 2024

Aspect	Category/Dimension	Data
Literacy	Sufficient Proficient Needs Special Intervention	68%, 23%, 9%
Numeracy	Sufficient Proficient Needs Special Intervention	72%, 18%, 10%
Character: Faithful and Devout	Average Score	3.5
Character: Mutual Cooperation	Average Score	3.3
Character: Critical Thinking	Average Score	2.8

ISSN: 2088-0308 | e-ISSN: 2685-0141
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The analysis of the Education Report data at SMP PGRI 1 Semarang shows that 68% of students have achieved a "Sufficient" level in literacy, 23% are "Proficient," and 9% are still at the "Needs Special Intervention" level. For numeracy, the distribution is 72% "Sufficient," 18% "Proficient," and 10% "Needs Special Intervention." The character data shows an average character index of 3.2 on a scale of 4.0, with the dimension "Faithful and Devout" achieving the highest score (3.5), "Mutual Cooperation" (3.3), and "Critical Thinking" relatively low (2.8). The table above shows that the majority of students are at the "Sufficient" level for literacy and numeracy, with a significant proportion at the "Proficient" and "Needs Special Intervention" levels. In terms of character, the dimension "Faithful and Devout" is the highest, while "Critical Thinking" still needs to be improved.

These findings form the basis for revising the school's strategic planning, with a focus on comprehensive literacy programs, contextual numeracy, strengthening critical thinking, and more intensive character strengthening through the Pancasila Student Profile Strengthening Project (P5) (Septyawati & Asbari, 2023). The SMART (Specific, Measurable, Achievable, Relevant, Time-bound) approach is used to ensure that these programs are targeted and measurable.

The monitoring and evaluation system at SMP PGRI 1 Semarang is integrated with the Education Report reporting cycle, including monthly monitoring, quarterly evaluation, and comprehensive annual evaluation. An internal dashboard developed by the school's IT team enables management to monitor progress in real time and conduct early interventions if necessary. In addition, the school implements regular reflection mechanisms through monthly "Reflection Meetings," involving all teachers and educational staff to reflect on program achievements, identify best practices, and design improvement strategies (Badrudin, 2024). A multi-channel communication mechanism is also developed to ensure accountability and transparency, including communication with parents through monthly newsletters, the school website, and quarterly parent meetings, as well as communication with students through "Student Voice" (Humantech, 2023). This approach is in line with the findings of other studies that emphasize the importance of the principal's role as a leader of digital transformation, teacher training, and collaboration among all stakeholders to create an effective and sustainable digital-based educational ecosystem (Arifin, 2024).

However, the implementation of the Education Report at SMP PGRI 1 Semarang also faces various challenges, including limited IT infrastructure, platform complexity, resistance to change, limited human resource capacity, and team coordination and synchronization (Munajah et al., 2021). Infrastructure limitations, such as internet bandwidth and the number of computers, hinder the optimal use of the Education Report platform (Azzahra, 2008). The complexity of the platform and a steep learning curve for teachers with limited digital literacy present additional challenges. Furthermore, resistance to change from some senior teachers and a heavy workload make the adoption of data-driven management less straightforward (Shobri et al., 2020). Coordination between school units and schedule synchronization are also challenges in implementing this new system. Other contextual challenges include diverse stakeholder expectations, student heterogeneity, inter-school competition dynamics, and the sustainability and continuity of implementation (Ansori, 2021).

The success of implementing the Education Report at SMP PGRI 1 Semarang is strongly influenced by leadership commitment, a gradual change management approach, and a focus on capacity building and collaboration among all stakeholders (Nurcahyati, 2023). However, the main challenges that remain are dependency on key personnel, integration of data into daily teaching practices, and optimization of parental and community involvement in quality improvement processes. In the long term, the school is expected to build an integrated digital ecosystem, strengthen collaboration with various parties, and become a model for data-driven quality management that can be replicated in other schools. As noted in international studies, data-driven decision-making has been proven to increase the effectiveness of school management and student learning outcomes (Levin & Datnow, 2012; Gill et al., 2014). The implementation of educational technology in the digital era also faces challenges such as the digital divide, infrastructure limitations, and the need for continuous teacher training (Ntorukiri et al., 2022; Efremova & Huseynova, 2023). Digital transformation in education demands paradigm shifts, curriculum adaptation, and strengthening teacher capacity to optimally utilize technology (Laurell et al., 2019; Salo et al., 2024). Collaboration between schools, government, and the community is the key to creating an inclusive and sustainable educational ecosystem in the digital era (Barria-Pineda et al., 2022).

ISSN: 2088-0308 | e-ISSN: 2685-0141
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However, implementing the Education Report in quality management can help schools make appropriate decisions based on their strengths and weaknesses. As shown by Novitasari, Prasetyo, and Asbari (2022), data-based planning using the Education Report can help schools identify strengths and weaknesses and design more targeted quality improvement strategies (Novitasari, Prasetyo, & Asbari, 2022). Prasetyo & Asbari (2023) also emphasize the importance of analyzing Education Report data for continuous evaluation and improvement (Prasetyo & Asbari, 2023).

Research by Perawati and Asbari (2022) affirms that implementing the Education Report in educational quality management can increase transparency, accountability, and the effectiveness of school management (Perawati & Asbari, 2022). Purwanto et al. (2020) also found that educational quality based on the Education Report can be improved through systematic data analysis and evidence-based planning (Purwanto et al., 2020). Septyawati and Asbari (2023) state that strategies for utilizing the Education Report in educational quality management can increase the effectiveness of school management and encourage continuous quality improvement (Septyawati & Asbari, 2023). Badrudin (2024) adds that integrating quality management into national education policy is very important for improving educational quality in the digital era (Badrudin, 2024).

Munajah et al. (2021) show that implementing educational quality management in elementary schools can improve the quality of the learning process and student learning outcomes (Munajah et al., 2021). Arifin (2024) emphasizes the importance of stakeholder roles in strategic decision-making in educational organizations to increase the effectiveness of school management (Arifin, 2024). Nurcahyati (2023) states that the opportunities and challenges of data-based planning using the Education Report must be considered so that educational quality management can run optimally (Nurcahyati, 2023). Humantech (2023) adds that school-based management can increase the effectiveness of school management and encourage continuous quality improvement (Humantech, 2023). Shobri et al. (2020) emphasize the importance of school principal strategies in improving educational quality, especially in the context of data and technology utilization (Shobri et al., 2020). Ansori (2021) also emphasizes that analysis of PISA results and educational challenges in Indonesia must be the basis for planning and evaluating educational quality (Ansori, 2021).

The results of this research reinforce the importance of data-based planning approaches in educational quality management in the era of digital transformation. Education Report data provides a strong foundation for strategic planning, monitoring, evaluation, and continuous improvement at SMP PGRI 1 Semarang.

CONCLUSION

Based on the research findings and discussion, it can be concluded that the implementation of the Education Report at SMP PGRI 1 Semarang has had a positive impact on educational quality management in the digital transformation era. Structured and measurable data from the Education Report enables the school to conduct objective evaluations of students' literacy, numeracy, and character development, allowing for more precise planning of quality improvement programs. While the majority of students have reached the "Sufficient" level in literacy and numeracy, efforts are still needed to increase the number achieving the "Proficient" level and to reduce those requiring special interventions. In terms of character, the dimensions of "Faithful and Devout" and "Mutual Cooperation" scored highest, while "Critical Thinking" remains an area for improvement. The successful implementation of the Education Report is supported by strong leadership commitment, phased change management strategies, and collaborative engagement with teachers, the school committee, and parents. The integration of monitoring and evaluation mechanisms within the reporting cycle, supported by internal dashboards and regular reflection sessions, has strengthened transparency and accountability in school quality management. This research reinforces the theoretical contribution that data-driven management is a critical framework in modern educational leadership, particularly in aligning planning, implementation, and evaluation processes. Practically, it provides a model for schools seeking to adopt evidence-based decision-making through the effective use of digital tools like the Education Report. The findings also offer strategic insights for policymakers, school leaders, and education practitioners in designing more targeted capacity-building, documentation, and stakeholder communication systems. Future studies are encouraged to replicate this research in schools with different characteristics or levels of digital readiness, to explore contextual factors that influence implementation effectiveness. Comparative studies could also be conducted across regions to enrich understanding of best practices and challenges in implementing data-driven educational quality management in diverse educational settings.

ISSN: 2088-0308 | e-ISSN: 2685-0141
https://doi.org/10.37630/jpi.v15i2.3019

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