



Educational Service Quality Management as a Strategy to Increase School Competitiveness in the Era of Globalization

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ABSTRACT

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This study aims to describe educational service quality management implementation, analyze strategies to improve school competitiveness through an educational service quality management approach, and offer applicable strategic recommendations based on quality management principles at State Senior High School 1 North Sangatta. This study uses a descriptive qualitative approach with the State Senior High School 1 North Sangatta research location. The research subjects included the principal, vice principal for curriculum and student affairs, education personnel, teachers, and several students and parents as users of educational services. Data was collected through observation, in-depth interviews, and documentation studies. Data analysis followed the interactive analysis model from Miles and Huberman, which includes data reduction, data presentation, and drawing conclusions and verification. The study results indicate that quality management practices in schools have been implemented through several separate initiatives that reflect the reliability of academic services. However, there are still weaknesses in responsiveness, especially in administrative services and complaint systems. This study recommends strengthening an integrated quality management system based on information technology and strategic leadership to improve school competitiveness in the era of globalization.

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INTRODUCTION

The globalized era demands that educational institutions provide not only quality learning but also superior and competitive educational services. As the world becomes increasingly interconnected, it is crucial for schools to adapt to the evolving demands of globalization to remain relevant and competitive. Educational services play a significant role in shaping students' futures, influencing their abilities to compete in the global job market. According to

Ganbold et al. (2022), a school's competitive edge is directly tied to the quality of its educational services. Therefore, quality management in education is essential for schools to stay competitive both locally and globally (Amzat et al., 2023). In a world where education systems are becoming more comparable, well-managed quality services help build a positive school image, enhance student loyalty, and bolster public trust. As competition intensifies, it is increasingly important for schools to focus on service quality as a core strategy.

In many educational institutions, especially in developing regions, the issue of quality management remains a significant challenge. Despite efforts to improve education, there are still numerous barriers to achieving high-quality educational services. Schools often struggle with inefficient administrative systems, outdated digital infrastructure, and weak communication channels between schools and students. These challenges hinder the growth and development of a school's reputation and competitiveness. The problem is especially critical in the context of globalization, where the rapid pace of technological advancements and the need for innovation demand that schools quickly adapt to new systems and processes. If these challenges are not addressed, schools may fall behind in comparison to more adaptive and innovative institutions, ultimately affecting their overall competitiveness.

The initial observation at State Senior High School 1 North Sangatta revealed several significant obstacles in its educational services. These included inadequate responsiveness from administrative services, limited access to digital facilities, and an underdeveloped feedback system between the school and its students. Moreover, the absence of standardized service documentation and weak periodic evaluations contributed to the stagnation of service quality. Without addressing these critical issues, the school risks losing its competitive edge, especially when compared to other institutions that have embraced innovation and digital tools. This situation emphasizes the urgency for educational service quality management to be prioritized as a fundamental component of a school's strategy to enhance its competitiveness.

Several previous studies have underscored the importance of service quality in improving educational competitiveness. Texeira-Quiros et al. (2022) and Jasti et al. (2022) highlighted how service quality can directly influence student satisfaction and institutional performance. Diana and Zaini (2023) further supported the notion that quality management practices in education contribute to institutional success. However, most of these studies are limited to assessing internal efficiency or focusing solely on student satisfaction. While valuable, they do not fully explore the strategic link between educational service quality management and the broader competitiveness of schools. The research gap lies in the limited investigation of how service quality management can be

strategically integrated into improving a school's position in the global educational landscape.

Although the existing literature provides valuable insights into the importance of educational service quality, few studies have investigated its role in improving school competitiveness within the context of globalization. This research gap is significant, as it limits the development of comprehensive strategies that can guide schools in adapting to the challenges of the globalized era. The existing studies have not adequately explored how educational institutions can systematically integrate Total Quality Management (TQM) principles into their operations to build long-term competitiveness. Therefore, this study aims to fill this gap by focusing on the role of educational service quality management as a key driver of competitiveness in schools, particularly in the face of globalization.

The novelty of this research lies in its focus on designing an educational service quality management strategy that is both adaptive to global demands and grounded in the actual needs of schools. While previous studies have examined TQM and educational service quality in isolation, this study takes a holistic approach by integrating both theoretical frameworks and practical strategies. By addressing the gaps in previous research, this study will provide valuable insights into how schools can optimize their educational service quality to enhance their competitiveness in a rapidly changing global landscape. The need to address this issue is urgent, as schools must adapt to global standards to thrive in the 21st century's competitive educational environment.

This research aims to answer the critical question: How can educational service quality management be strategically used to improve the competitiveness of secondary schools in the globalization era? The study argues that implementing effective service quality management strategies, based on the principles of TQM, is essential for schools to maintain and enhance their competitiveness. By focusing on key areas such as responsive administrative services, digital infrastructure, and effective communication systems, this research will provide actionable recommendations for schools to improve their service quality. The findings will not only contribute to theoretical advancements in educational management but also offer practical insights for stakeholders to develop policies and strategies that ensure long-term competitiveness.

RESEARCH METHOD

This study uses a descriptive qualitative approach to gain an in-depth understanding of the implementation of educational service quality management

as a strategy to improve school competitiveness in the era of globalization. This approach was chosen because it can describe social realities and educational phenomena contextually and reveal the meaning behind the managerial actions and strategies implemented by schools.

The location of the study was State Senior High School 1 North Sangatta, East Kutai Regency, East Kalimantan. This school was selected based on the results of initial observations that showed the need to strengthen educational services to face competition in the global era.

The research subjects were selected purposively, namely, those directly involved in managing educational services. The primary informants include the principal, vice principal for curriculum and student affairs, education personnel, teachers, and several students and parents. Data were collected through three main techniques: direct observation of educational service activities in the school environment; in-depth interviews with informants to explore the quality management strategies implemented; and documentation studies of documents such as vision-mission, service standards, quality evaluation reports, and school work programs.

To ensure the validity of the data, source and technique triangulation techniques were used, such as comparing the results of observations, interviews, and documentation to obtain consistent findings. Researchers were also directly involved in the data collection process to increase credibility, which includes three main stages: data reduction, data presentation, and conclusion. The data collected were grouped according to the research focus and then analyzed to find patterns and relationships between quality management of educational services and increasing school competitiveness. This approach is expected to provide a complete and in-depth picture of how quality management strategies can be implemented effectively to strengthen the position of schools amidst global competition.

RESULT AND DISCUSSION

Result

Implementation of Quality Management of Educational Services

Based on observations, interviews with the principal, teachers, and staff, as well as documentation studies, it was found that State Senior High School 1 North Sangatta has made various efforts to improve the quality of educational services. However, the implementation of these efforts has not been integrated into a comprehensively documented quality management system. The school's primary focus is to provide satisfaction to stakeholders, especially students, parents, and the community, through internal evaluations, complaint systems, and teacher training.

State Senior High School 1 North Sangatta has shown positive efforts in several dimensions of quality management, particularly in terms of reliability and educator competence. The key findings supporting this are the stability of the lesson schedule, assessment calendar, and the availability of certified teaching staff. The quality of education at this school is reflected in the stability of the academic process, which runs as planned.

Despite the positive efforts, several significant weaknesses were found in some dimensions of quality that could hinder the effectiveness of educational services if not immediately addressed. These weaknesses were identified in three main dimensions: Responsiveness, Assurance, and Tangibles. In terms of responsiveness, while efforts are made to provide academic information, administrative services and academic information are still considered slow. Complaints have not yet been served digitally. This can trigger complaints from students and parents, which in turn can damage the image of the service quality.

Regarding assurance, while the teachers are certified and credible, the student data security procedures have not yet been standardized, resulting in weak assurance of data confidentiality. Although the credibility of the teachers is sufficient, the weakness in this area reduces the sense of security for parents and students regarding the protection of personal data.

In terms of tangibles, while the physical facilities, such as the school building, are quite representative, most of the ICT equipment is outdated. While the physical environment of the school is quite good, there is a noticeable technological gap that affects the effectiveness of ICT in supporting learning.

From these findings, it can be concluded that the implementation of educational service quality management at State Senior High School 1 North Sangatta is quite good, especially in terms of teacher reliability and competence. However, to achieve a higher and more integrated standard of educational quality, improvements are needed in several weak dimensions, namely responsiveness to complaints, assurance of student data security, and ICT infrastructure. It is essential for the school to develop a documented, integrated, and adaptive quality management system that can keep up with digitalization. This will enhance the efficiency, effectiveness, and quality of the educational services at the school.

Table 1. Implementation of Educational Service Quality Management		
Dimension	Field Findings	Implications
SERVQUAL*		

Reliability	The study schedule, assessment calendar, and provision of teaching staff are stable.	Ensure that the academic process runs according to plan.
Responsiveness	Administrative services and academic information are slow; complaints have not been served digitally.	Triggers complaints from students/parents, lowering the image of service quality.
Assurance	Certified teachers; however, student data security procedures are not yet standardized.	Teacher credibility is sufficient, but data confidentiality assurance is weak.
Empathy	Proactive Counseling Guidance, but limited consultation space.	Affective support exists, but facilities are inadequate.
Tangibles	Representative building; however, most ICT equipment is old.	The physical environment is quite good, but the technological gap is felt.

To improve the quality of educational services, it is necessary to take corrective actions that include developing a more responsive system to the needs of stakeholders, strengthening data security assurance, and enhancing the technological infrastructure.

Strategy for Increasing School Competitiveness through Service Quality Management

State Senior High School 1 North Sangatta has implemented several strategies to enhance its competitiveness in the educational sector. These strategies are primarily focused on strengthening the quality of educational services through a digital approach, standardization of procedures, fostering a quality culture, and active collaboration with stakeholders. Although these initiatives are still in the early stages of implementation, they demonstrate a clear, progressive direction aligned with modern education quality management principles.

One of the primary strategies employed by the school is the digitalization of services. The school has introduced an academic website that provides essential information such as schedules, exams, and announcements. Additionally, an internal quality dashboard has been developed to monitor and assess school performance.

However, this digital transformation is not without its challenges. The digital services are not yet fully integrated, and the school's human resources are not entirely prepared to manage the digital systems effectively. To strengthen this strategy, it is recommended that the school invest in digital-based human resources training, integrate cross-unit dashboards, and conduct routine data evaluations to ensure continuous improvement.

The school has made efforts to standardize procedures by developing

written Standard Operating Procedures (SOPs) for various services such as administration, library management, and counseling. Additionally, benchmarking activities have been conducted by comparing practices with schools like SMA Labschool and SMA Samarinda.

Despite these efforts, some areas remain underdeveloped. For instance, the laboratory does not yet have an SOP, and routine audits of the SOPs have not been implemented. To address these gaps, it is recommended that the school finalize the SOPs through Focus Group Discussions (FGD), implement periodic audits based on the PDCA (Plan-Do-Check-Act) cycle, and digitize the SOPs to streamline processes and ensure consistency.

The school has embraced a Total Quality Management (TQM) approach to foster a quality culture. This includes the active formation of a cross-unit team, known as the quality circle, and the application of the PDCA cycle in school programs. While the implementation of this quality culture has begun, it remains in the early stages. Not all programs consistently utilize the PDCA cycle.

To further strengthen this initiative, it is crucial to enhance reflective leadership, integrate the PDCA cycle into the school's work culture, and establish periodic evaluations to monitor progress and identify areas for improvement.

Another key strategy is the active involvement of stakeholders in the school's educational process. The school has established dialogue forums with parents and the school committee, and it regularly conducts alumni teaching sessions and satisfaction surveys for students and parents. These efforts are designed to ensure that the school's programs are responsive to the needs of its stakeholders.

However, the school faces challenges in expanding stakeholder involvement beyond formal forums. Additionally, survey results are not always integrated into school planning. To address these issues, it is recommended that the school increase business involvement, utilize survey results in the school's annual planning (RKS), and build a feedback loop system that allows for continuous stakeholder input and engagement.

The four main strategies—service digitalization, procedure standardization, quality culture, and stakeholder involvement—serve as the foundational pillars in State Senior High School 1 North Sangatta's efforts to enhance its competitiveness in the era of globalization. While these strategies are still in the early stages and face certain obstacles, the school's development direction is progressive and aligns with modern education quality management principles.

Through the co-creation of services, State Senior High School 1 North Sangatta has taken a significant step towards participatory education management. The involvement of external stakeholders, primarily through

discussion forums, alumni activities, and satisfaction surveys, plays a crucial role in strengthening school competitiveness. This approach ensures that the educational services are responsive, adaptive, and sustainable, meeting the challenges of the future while maintaining high educational standards.

Table 2. Strategy for Increasing School Competitiveness through Service Quality Management

No.	Strategy	Implemented Practice	Challenges/Weaknesses	Recommendations for Strengthening
1	Integrated Service Digitalization	- Academic website (schedule, exams, announcements) - Internal quality dashboard developed	- Digital services are not fully integrated - Human resources are not fully ready	- Digital-based Human Resources Training - Cross-unit dashboard integration - Routine data evaluation
2	SOP Standardization and Benchmarking	- Written SOP for administrative services, library, counseling guidance - Benchmarking to SMA Labschool and SMA Samarinda	- There is no SOP in the laboratory - SOP audits are not routine	- Finalization of SOP through FGD - PDCA-based periodic audit - Digitization of SOP
3	TQM Based Quality Culture	- Active cross-unit team (quality circle) - School program uses PDCA cycle	- Implementation is still in the early stages - Not all programs consistently use PDCA	- Need to strengthen reflective leadership - Make PDCA a work culture - Periodic evaluation
4	Co-creation of Services with Stakeholders	- Dialogue forum with parents & committee - Alumni Teaching & student/parent satisfaction surveys are conducted regularly	- Still limited to formal forums - Survey results have not always been integrated into school planning	- Increase business involvement - Use survey results in RKS - Build a feedback loop system

These strategies provide a clear pathway for continuous improvement, making the school's competitiveness and educational quality more sustainable in the long run.

Strategic Recommendations Based on Educational Service Quality Management

Based on field observations, researchers have identified key areas for improvement to enhance the competitiveness of State Senior High School 1 North Sangatta over the next 12 to 24 months. Although the school has made efforts to improve educational services, its quality management system has not been systematically integrated or documented. Additionally, information services are still handled manually, and collaboration with the business world has not been sustainable. To improve both internal efficiency and external recognition in the context of educational globalization, the school must focus on quality system integration, service digitalization, and strategic collaboration with stakeholders.

To strengthen the internal management of educational services, it is recommended that the school prioritize the integration of a structured quality management system. This includes the formation of a dedicated Quality Management Unit (QMU), which would be directly supervised by the principal. The school should also adopt international standards such as ISO 21001 or national education quality models (e.g., SNP or SNP $\pm$ e SNP) to align with global education standards. Success can be measured by the active operation of the QMU and its documentation, along with conducting an internal quality audit at least once per year.

With the growing importance of technology in education, it is crucial for the school to transition to a digital-first approach. One way to achieve this is by launching a mobile application, SMA1SU Mobile, which will provide essential services such as information sharing, payment management, complaints handling, and electronic reports. Additionally, to ensure timely and efficient complaint resolution, the school should implement an online Service Level Agreement (SLA) that guarantees a response to complaints within 24 hours. Success indicators for this initiative would include the mobile application being downloaded by at least 80% of the school community and ensuring that 90% of complaints are resolved within 24 hours.

In addition to improving internal systems, the school must strengthen its collaboration with external stakeholders to enhance its competitiveness in the global education landscape. One of the key recommendations is the development of an Industry-School Partnership Program, which could include student internships and guest lectures from industry professionals. Strengthening the ties with alumni by creating pathways for scholarships and graduate recruitment will also help improve the school's reputation and increase the employability of its graduates. Success in this area would be reflected by at least three new industry Memorandums of Understanding (MoUs) signed annually and 75% of graduates

being accepted into leading public universities or securing relevant job opportunities.

The three strategic directions—quality system integration, digital transformation of services, and strengthening collaboration with the business world—are essential for improving the long-term competitiveness of State Senior High School 1 North Sangatta in the era of globalization. The simultaneous implementation of these strategies will not only improve the school's internal efficiency but also raise its external reputation, positioning it as a leading institution in an increasingly competitive global educational environment. By adopting these recommendations, the school will be better equipped to meet the demands of modern education and maintain its relevance in a rapidly evolving world.

Table 3. Strategic Recommendations Based on Educational Service Quality Management

No	Strategic Direction	Operational Recommendations (12–24 Months)	Success Indicators
1	Quality System Integration	– Form a Quality Management Unit (QMU) directly under the principal. – Implement ISO 21001 standards or national education quality models (SNP ±e SNP).	– QMU is active & documented. – Internal quality audit at least 1x/year.
2	Digital Service Excellence	– 1. Launch the SMA1SU Mobile application (information, payment, complaint, e-report). – Set up an online service level agreement (SLA) for complaint response <24 hours.	– The application was downloaded by ≥80% of school residents. – 90% of complaints were resolved in ≤24 hours.
3	Collaborative Competitive Advantage	– Industry–School Partnership Program (student internships, guest lectures). – Alumni linkage pathway for scholarships & graduate recruitment.	– ≥3 new industry MoUs/year.– 75% of graduates are accepted at leading PTN/du.

The three suggested strategic directions – integration of quality management systems, digital transformation of services, and strengthening collaboration with DU/DI – are very much in line with the demands of modern education service quality management. The simultaneous implementation of these three strategies will improve internal efficiency and boost the external reputation of State Senior High School 1 North Sangatta as a leading institution amidst global competition.

Discussion

To analyze the quality of educational services at State Senior High School 1 North Sangatta, the SERVQUAL model was employed, which evaluates service quality through five key dimensions: reliability, responsiveness, assurance, empathy, and tangibles. This model has been widely recognized in the education sector for its effectiveness in assessing user experience and service quality. Alongside the SERVQUAL model, the Total Quality Management (TQM) approach was also considered. TQM emphasizes the importance of a comprehensive and sustainable quality management system, rather than isolated practices, and its principles were incorporated into the analysis of the school's educational services (Abbas & Kumari, 2023; Hassis et al., 2023; Mohsin et al., 2025; Al Shraah et al., 2022; Abas, 2024).

Reliability in the context of educational services refers to the consistency and dependability of school operations, including lesson schedules and teacher attendance. At State Senior High School 1 North Sangatta, the stable learning schedule and consistent subject teachers are indicative of operational reliability. These findings align with previous research (Shah & Bhattarai, 2023; Su et al., 2024; Wang et al., 2021), which highlighted that the consistency of the schedule and teacher attendance is crucial for building trust with students and parents. However, there is a noticeable gap in the documentation system, as achievements are not measured longitudinally, preventing the school from assessing its progress over time. This lack of a standardized documentation system undermines the full potential of the school's efforts in maintaining reliability.

Responsiveness, another critical aspect of service quality, has been identified as a weak point at the school. The manual and slow nature of the information services contradicts modern TQM principles, which advocate for quick and accessible services (Ren, 2024). To improve responsiveness, the school must transition to digital platforms for managing complaints and sharing academic information. This digital transformation is crucial to meeting the needs of students and parents promptly and efficiently.

In terms of assurance, the school benefits from having certified teachers, ensuring a certain level of competence in its educational services. However, a significant weakness lies in the lack of standardized procedures for safeguarding student data. The absence of such protocols undermines the school's ability to ensure the security of students' personal information, which is a vital part of building trust with both students and parents. The assurance dimension should therefore not only focus on teacher competence but also address the critical need for data security, as emphasized by Gusti (2024), who highlighted that in the 21st century, quality assurance in education must also include the protection of personal data as part of institutional trust.

The school demonstrates empathy through the proactive role of the

counseling guidance teacher, who takes an active interest in student welfare. However, the limited consultation space available for students diminishes the effectiveness of this service. The provision of adequate space for student consultations is essential for fostering a supportive environment where students can freely discuss their concerns. Inadequate facilities for psychological services undermine the overall quality of interpersonal relationships within the school, which are key to students' emotional well-being, as noted by Hoover & Bostic (2021), who argued that the availability of psychological support facilities plays a crucial role in determining the quality of interpersonal relationships within schools.

Tangibles, which refer to the physical aspects of the school environment and resources, show a commitment to physical comfort. The school building is representative of the school's efforts to ensure a positive learning environment. However, outdated ICT equipment poses a barrier to the full integration of digital learning tools. In the era of digital transformation, an up-to-date ICT infrastructure is essential to maintain competitiveness. State Senior High School 1 North Sangatta is still in the process of digital transformation, and its current efforts are partial and not yet directed at a fully documented and digitalized education quality system. Compared to schools implementing ISO 21001 or other digital-based quality management frameworks, this school's digital infrastructure is still transitioning.

In terms of strategies for improvement, the school has already started implementing digital services, beginning with an academic website that provides essential information such as lesson schedules, exam calendars, and graduation announcements. Although these efforts are not yet comprehensive, they represent the initial steps toward digital transformation. The school has also developed a quality dashboard to monitor teacher attendance and service satisfaction. However, challenges remain, particularly in the readiness of human resources and the limitations of digital infrastructure. For the digital transformation to have a significant impact on the school's competitiveness, it is necessary to strengthen human resources through training, integrate systems across different departments, and utilize data for informed decision-making, as noted by Zavyalova et al. (2022), Gupta et al. (2022), and Chwiłkowska-Kubala et al. (2023). Digital transformation must be supported by HR training, system integration, and periodic data-based evaluation (Teng et al., 2022).

In addition, the school has made progress in standardizing procedures, with written Standard Operating Procedures (SOPs) already in place for various units such as administrative services, libraries, and counseling. However, the laboratory unit still lacks an SOP, which has led to occasional miscommunication. To address this, it is recommended that the school finalize the SOP for the

laboratory through Focus Group Discussions (FGD) with science teachers and students. Regular audits of SOPs should be carried out using the Plan-Do-Check-Act (PDCA) cycle to ensure continuous improvement. Furthermore, benchmarking against leading schools can provide valuable insights into best practices, particularly in areas such as online counseling and staff reward systems (Jasti et al., 2022; Hassis et al., 2023).

The school has also begun the process of strengthening its quality culture through TQM. Small cross-unit teams have been formed to evaluate and solve routine issues, such as student tardiness and discipline. This approach reflects the core principles of TQM, which emphasize continuous improvement and the active involvement of all members of the school community. While the internalization of a quality culture is still in its early stages, the success of this initiative will depend on the sustainability of quality circle practices, the consistency of PDCA implementation, and the development of leadership that fosters a reflective and evaluative culture, as highlighted by Alghamdi (2024) and Iqbal (2021). This collaborative approach is essential for building a shared commitment to quality education services.

In terms of service co-creation, the school actively involves parents, alumni, and school committees in various activities, such as dialogue forums, satisfaction surveys, and "Alumni Mengajar" programs. These initiatives are in line with the principles of service co-creation, where external stakeholders actively participate in the decision-making process. Although the explicit term "educational service co-creation" has not been widely discussed in national journals, similar practices have been seen in other educational settings. The involvement of stakeholders in the planning and evaluation of educational services is essential to improving the quality and relevance of the services provided (Merrilees et al., 2021; Matarazzo et al., 2025).

In conclusion, the lack of a fully integrated quality management system at State Senior High School 1 North Sangatta is a significant challenge to optimizing educational outcomes. Creating a quality culture requires a documented, measurable, and data-driven approach, as emphasized by Deming's Fourteen Points for Quality Management (Ramanathan, 2025; Bayo-Moriones & de la Torre, 2022). The school's digital transformation is crucial for improving service quality and efficiency, as shown by studies on digitalization in education (Rukhiran et al., 2022; Wilkens et al., 2021). Lastly, collaboration with the business world and industry must move beyond ceremonial approaches to strategic partnerships. Such partnerships can help prepare students for a competitive workforce and enhance the school's overall effectiveness. By focusing on these areas, the school can enhance its competitiveness and better serve its students and stakeholders.

CONCLUSION

Based on the research results, it can be concluded that the implementation of quality management of educational services at State Senior High School 1 North Sangatta has shown a number of positive initiatives, especially in the aspect of reliability of academic services such as learning scheduling, assessment implementation, and teacher assignments according to expertise. However, the quality management implemented has not been fully integrated into a documented and sustainable system. In addition, significant weaknesses are still found in the responsiveness aspect, especially in administrative services and complaint systems that are not yet digital-based and less responsive to the needs of users of educational services. This condition is a challenge in increasing the satisfaction of school stakeholders and has the potential to hinder the competitiveness of institutions in the era of globalization. As a strategy to increase school competitiveness, this study recommends the importance of strengthening an integrated educational service quality management system based on information technology, increasing human resource capacity, and school leadership that is oriented towards innovation, excellent service, and continuous improvement. This approach is expected to strengthen the competitive position of schools in facing increasingly complex global dynamics.

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