

THE ROLE OF STRATEGIC MANAGEMENT IN STRENGTHENING STUDENTS' CHARACTER AND DIGITAL LITERACY

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Abstract: Twenty-first-century education requires educational institutions to focus not only on academic achievement but also on character development and the enhancement of students' digital literacy. This study aims to analyze the role of strategic management in systematically and sustainably integrating these two crucial aspects within the environment of State Vocational High School 1 Kapuas Murung. The author employed a descriptive qualitative approach, with data collected through observation, in-depth interviews, and document analysis. The findings indicate that strategic management at the school is implemented through vision-based program planning, the synergistic execution of character and digital learning activities, and periodic program evaluation. These strategies foster a school culture that supports the development of students who are not only technically proficient but also possess integrity, digital ethics, and critical thinking skills. This study recommends strengthening school managerial capacities in formulating and implementing integrated policies on character education and digital literacy.

Keywords: strategic management, character development, digital literacy.

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Introduction

Education in the 21st century demands a fundamental transformation not only in learning approaches but also in educational management. Schools are no longer merely institutions for knowledge transmission; they must also serve as platforms for character development and the cultivation of life skills relevant to contemporary challenges, including digital literacy. Amidst the rapid current of globalization and technological advancement in the era of the Fourth Industrial Revolution, the ability to use technology wisely and ethically has become indispensable. However, digital literacy without strong character may lead to adverse effects on students.

Digital literacy goes beyond the mere operation of technological devices; it encompasses critical thinking skills, the ability to assess and filter information, and ethical interaction in digital spaces. As noted by (Bintoro, 2023), well-developed digital literacy can significantly contribute to shaping students' critical thinking, enhancing communication skills, and reinforcing moral values through responsible and mindful use of digital media. This underscores the immense potential of digital literacy as a vehicle for character development if managed in a structured manner.

The character-building process does not occur instantaneously; it requires systematic, planned, and continuous implementation within the school environment. This condition necessitates the active involvement of schools in formulating strategies that align all educational resources and activities toward the goal of character development (Ratna, 2023). Strategic management in educational settings refers to a systematic process of formulating institutional vision and mission, designing

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supporting programs, implementing policies, and conducting continuous evaluations to achieve optimal educational outcomes. According Hilda Yunita, (2023), the consistent application of strategic management in educational institutions can improve program efficiency, strengthen school culture, and serve as an effective tool in shaping students' character and enhancing their digital literacy.

Through such an approach, schools function not merely as administrative entities, but as change agents that respond proactively to the dynamics and challenges of digital-era education. Despite the widely acknowledged urgency of strengthening character and digital literacy, many educational institutions still implement these two agendas separately and without a coherent strategic framework (Supriani, 2024). This separation often leads to low effectiveness in achieving educational objectives, particularly in developing character values and students' digital competencies. In the rapidly evolving digital age, educational institutions face increasingly complex and dynamic challenges.

One of the most fundamental challenges is how to shape resilient and ethical student character amidst an unrelenting flow of information. On the other hand, digital literacy has become an essential skill that every student must possess to adapt and compete in an increasingly interconnected global society (Haryana, 2018). Many schools, including vocational high schools (SMK), still implement these two agendas independently, without a clear and integrated synergy. This condition reveals a gap between functional digital literacy and character-based digital literacy grounded in moral values. In schools such as SMK Negeri 1 Kapuas Murung, this issue becomes even more complex. As institutions oriented toward workforce readiness, vocational schools typically focus more on technical skills or hard skills (Suriansyah, 2014).

However, graduates' success in the workplace is determined not only by technical competencies but also by character qualities such as integrity, discipline, collaboration, and ethically grounded, adaptive digital literacy. Several studies have shown that digital literacy plays a central role in enhancing 21st-century competencies (Cahyani & Miyono, 2024), while character education is recognized as a foundational component in shaping students' personality and integrity (Firman, 2024). Nevertheless, most existing studies tend to examine these two aspects in isolation. Character-based learning and digital literacy enhancement are often treated as separate initiatives, not embedded within an integrated strategic management framework.

Therefore, this study seeks to address that gap by offering a new perspective on the integration of character education and digital literacy within a systematic and sustainable school management system. Scholarly works that directly explore the role of strategic managerial practices in integrating character education and digital literacy within vocational school settings remain scarce. Yet, educational success is shaped not only by the mastery of technical skills, but also by the development of adaptive and responsible student character and digital literacy. Thus, this research aims to bridge that gap by examining in depth the role of school strategic management in integrating the two core educational agendas of the 21st century: character development and digital literacy. The study focuses on SMK Negeri 1 Kapuas Murung as a case study, with the intention of generating a contextual and applicable strategic approach model for other educational institutions.

Method

This study employed a qualitative approach using a case study design. This approach was chosen for its ability to provide an in-depth understanding of complex managerial phenomena in the educational context, particularly in examining strategies for strengthening students' character and digital literacy. The case study method offers a comprehensive exploration of field dynamics and allows for a thorough investigation of how strategic management is implemented within a school setting. The research site was purposively selected: SMK Negeri 1 Kapuas Murung in Central Kalimantan. This school was chosen because it represents the characteristics of a vocational institution oriented toward workforce readiness, while simultaneously facing the challenge of producing graduates who are not only technically competent but also possess strong character and digital literacy.

Data collection techniques included in-depth interviews, participant observation, and document analysis. Interviews were conducted to explore the perspectives and experiences of informants

regarding the planning, implementation, and evaluation of strategic programs related to character education and digital literacy. Observations focused on classroom activities and school programs related to these themes, while document analysis was used to gather secondary data such as the school's strategic planning documents, annual work programs, and internal policies supporting character development and digital literacy. The collected data were analyzed using Miles and Huberman's interactive model, which consists of three stages: data reduction, data display, and conclusion drawing/verification (Nurhadi, 2020). Data reduction was conducted to filter information relevant to the research focus. The reduced data were then presented in descriptive narrative form.

Results

School Strategies for Strengthening Student Character.

SMK Negeri 1 Kapuas Murung has developed various strategies to strengthen student character as an integral part of its value-based educational vision. These strategies encompass the integration of character values into intraclass, co-curricular, and extracurricular activities. At the intraclass level, teachers actively incorporate values such as honesty, responsibility, and discipline into the learning process through contextual teaching approaches and problem-based learning. Meanwhile, co-curricular activities such as flag ceremonies, classroom cleanliness programs, and morning literacy sessions serve as platforms for cultivating character-building habits. Extracurricular activities including scouting (Pramuka), the flag-raising troop (Paskibra), and student organizations provide avenues for the actualization of values such as leadership, solidarity, and mutual cooperation.

The school principal, together with the management team, formulates an annual strategic plan that prioritizes character development. This strategy is supported by the establishment of a character curriculum development team, teacher training to serve as role models, and a student attitude evaluation system based on affective assessment (Edo Prabowo, 2021). These initiatives demonstrate that the school does not merely instill character values in a normative sense, but rather applies a systematic and measurable approach aligned with educational strategic management principles. At SMK Negeri 1 Kapuas Murung, character development is not limited to extracurricular domains, but is fully integrated into the school's instructional system and overall culture. Multiple strategies are implemented by the school to systematically and sustainably embed character values.

These strategies include curriculum integration, extracurricular engagement, religious habituation, teacher role modeling, and the active involvement of homeroom teachers and guidance counselors (Wahab, 2021). This approach ensures that character values are not only taught theoretically but also practiced in students' daily lives. To clarify the forms and intensity of the implementation of these strategies, the following table presents qualitative data based on observations, document analysis, and interviews with school stakeholders:

Table 1. School Strategies for Strengthening Student Character

No	Character-Building Strategy	Forms of Implementation in School	Source of Information	Frequency
1	Integration of Character Values in Curriculum	Embedding values of responsibility, discipline, and collaboration into subjects	Subject teachers	Daily
2	Character-Based Extracurricular Activities	Activities such as Scouts, Student Council (OSIS), Religious groups, Flag Ceremony	Extracurricular supervisors	Weekly / Monthly
3	Teacher Role Models and School Culture	Role model programs, exemplary students, 5S culture (Smile, Greet, Salute, Polite, Respectful)	Vice Principal	Daily / Monthly
4	Soft Skills and Character Training	Workshops on anti-bullying, leadership, work ethics	External institutions (Local Govt/NGOs/BNN/School Committee)	Every semester

No	Character-Building Strategy	Forms of Implementation in School	Source of Information	Frequency
5	Religious and Spiritual Programs (IMTAQ)	Morning prayer, Qur'an recitation (tadarus), Clean Friday, Islamic boarding program	Religion teachers & Student Affairs Team	Daily / Monthly
6	Mentoring by Homeroom Teachers and Counselors	Monitoring student behavior and character counseling	Homeroom teachers and School Counselors	Weekly

Author information source 2025

The table above illustrates various forms of strategies implemented by SMK Negeri 1 Kapuas Murung to strengthen student character. Six key strategies were identified based on qualitative data collected through interviews with the school principal and teachers, as well as direct field observations. According to (Fuad, 2021), character education must be embedded through both structured instruction and school culture. These six strategies include: First, Integration of Character Values into the Curriculum: This is the primary strategy, in which character values such as responsibility, discipline, and collaboration are embedded into each subject area. Teachers are encouraged to focus not only on cognitive learning but also on nurturing students' attitudes through contextual and problem-based learning approaches.

Second, Character-Based Extracurricular Activities: Activities such as scouting (Pramuka) and the student council (OSIS) serve as platforms for practical character development. Through these programs, students are trained in leadership, social sensitivity, decision-making, and accountability. Third, Teacher Role Modeling and School Culture: The consistent application of character values is reinforced through teachers' behavior and the school culture, particularly through the 5S program (Smile, Greet, Salute, Politeness, and Courtesy). Teachers serve as the primary figures for behavioral modeling within the school environment. Fourth, Soft Skills and Character Training Programs: The school regularly organizes training sessions and seminars aimed at developing students' non-academic competencies, such as work ethics, communication skills, and prevention of deviant behavior. Although less frequent than other strategies, these programs have significant impacts on student awareness and behavior.

Fifth, Religious and Spiritual (IMTAQ) Programs: Spiritual values are instilled through daily and weekly religious activities, such as group prayers, Qur'an recitation (tadarus), and Islamic boarding programs (pesantren kilat). These initiatives are effective in cultivating moral awareness and ethical behavior among students. Last, Homeroom Teacher and Counseling Support: Personalized support is provided through the involvement of homeroom teachers and school counselors, who monitor students' character development and offer guidance in addressing behavioral issues.

School Strategies for Enhancing Digital Literacy.

In developing students' digital literacy, SMK Negeri 1 Kapuas Murung has implemented several strategic programs aimed at cultivating the ability to use technology intelligently and responsibly. The school provides essential ICT infrastructure, including computer laboratories, internet access, and Learning Management Systems (LMS)-based instruction. Beyond providing facilities, the digital literacy strategy also includes the integration of digital tools in daily instruction such as the use of Google Classroom, Canva for presentations, and online platforms for digital-based assessments.

More importantly, the school embeds critical digital literacy education focusing on digital ethics, cybersecurity, and the ability to evaluate online information. ICT teachers collaborate with guidance counselors to deliver lessons on internet safety, digital footprints, and ethical social media behavior. These efforts reflect the school's strategic approach to ensure that digital literacy encompasses not only technical proficiency but also values-based and responsible digital citizenship.

To further analyze the school's position and guide future strategy, a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) was conducted. This analysis identifies internal and external

factors influencing the effectiveness of digital literacy initiatives, providing a framework for the development of more targeted and integrated digital literacy programs.

Table 2. SWOT Analysis of School Strategies for Enhancing Digital Literacy at SMK Negeri 1 Kapuas Murung

Strengths	Weaknesses
<ul style="list-style-type: none"> • Availability of computer laboratories and internet access within the school environment. 	<ul style="list-style-type: none"> • Not all teachers have optimal proficiency in utilizing digital technologies.
<ul style="list-style-type: none"> • Presence of competent ICT teachers who actively support digital learning. 	<ul style="list-style-type: none"> • Digital infrastructure is not yet evenly distributed across all classrooms.
<ul style="list-style-type: none"> • Implementation of digital habituation programs, such as the use of LMS (e.g., Google Classroom). 	<ul style="list-style-type: none"> • Lack of regular training related to digital literacy and online ethics.
<ul style="list-style-type: none"> • Strong support from the school principal for digital innovation. 	<ul style="list-style-type: none"> • Limited parental involvement in monitoring students' use of technology at home.
Opportunities	Threats
<ul style="list-style-type: none"> • Government support for educational digital transformation (e.g., Merdeka Curriculum policy). 	<ul style="list-style-type: none"> • Misuse of technology by students, including plagiarism and cyberbullying.
<ul style="list-style-type: none"> • Easy access to open digital learning resources and educational media. 	<ul style="list-style-type: none"> • Inequality in access to technology among students from diverse socioeconomic backgrounds.
<ul style="list-style-type: none"> • Potential for collaboration with digital literacy communities and ICT institutions. 	<ul style="list-style-type: none"> • Rapid technological developments may render school programs obsolete if not regularly updated.
<ul style="list-style-type: none"> • Availability of free educational platforms that promote self-directed learning. 	<ul style="list-style-type: none"> • Digital fatigue caused by excessive and prolonged use of electronic devices.

Source: Compiled by the author, 2025

SWOT Analysis of School Strategies in Enhancing Digital Literacy, The SWOT analysis of the school's strategy for enhancing digital literacy at SMK Negeri 1 Kapuas Murung provides a comprehensive overview of the internal and external conditions influencing the success of the program's implementation. The analysis reveals several strengths, such as the availability of well-equipped computer laboratories, stable internet access, and the presence of competent ICT teachers. These strengths serve as foundational assets in supporting digital literacy initiatives among students. Additionally, the school principal's strong support for educational technology adoption is a critical driving force in advancing digital transformation within the learning environment. Digital habits, such as the gradual implementation of Learning Management Systems (LMS) and other digital learning media, have already been introduced progressively.

Effectiveness of the Strategy and Its Impact on Students

Findings from observations and interviews indicate that the strategies employed by the school have had a significant impact on the development of students' character and digital literacy. Many students have demonstrated improvements in discipline, responsibility, and social awareness both within and beyond the school environment. Likewise, in terms of digital literacy, most students have progressed beyond using technology merely for entertainment and have begun leveraging it for learning and personal development purposes. However, the effectiveness of these strategies remains contingent upon consistent implementation and adequate resource support. Some challenges include the limited professional development opportunities for teachers in value-based digital literacy and the lack of integrated monitoring for character development programs beyond formal learning settings. Nevertheless, the school's integrated strategic approach has laid a strong foundation for building a character-driven and technologically adaptive school culture.

Table 3. Student Character and School Culture at SMK Negeri 1 Kapuas Murung

Aspect	Indicator	Positive Findings	Challenges
Character	Discipline	Most students arrive on time and comply with school regulations.	Inconsistent monitoring of student discipline across all classes.
	Responsibility	Increased student involvement in OSIS and environmental programs.	Requires continuous monitoring to ensure sustained responsibility.
	Social Awareness	Regular participation in sharing and mutual cooperation programs.	Not all students are actively engaged in extracurricular social activities.
	Communication Ethics	Courteous and respectful behavior during group discussions.	Ethical communication is still suboptimal in digital forums, such as classroom WhatsApp groups.
Digital Literacy	Use of Technology for Learning	Most students use digital platforms to access learning materials.	Limited internet access in some students' home areas.
	Digital Creativity	Some students have begun creating educational content (videos, blogs, digital posters).	Not all teachers provide support for digital product development.
	Digital Ethics	Growing student awareness to avoid spreading hoaxes and maintain online privacy.	Lack of dedicated training programs on digital ethics.
	Information Evaluation Skills	Students can compare multiple information sources before drawing conclusions.	Needs stronger integration of critical thinking skills in every subject.

Source: Compiled by the author, 2025

The research findings indicate that the majority of the school's strategies have had a positive impact on the development of student character, particularly in fostering discipline, responsibility, and social awareness. On the other hand, strategies aimed at enhancing digital literacy have also begun to yield results, as evidenced by the increased ability of students to use technology both productively and ethically. However, the effectiveness of these strategies is highly dependent on the consistency of implementation, the readiness of human resources, and the support from internal school policies. In order to present a clearer and more structured understanding of these findings, the data is organized thematically and visually through tables and diagrams. These presentations include key indicators, implementation challenges, and teachers' perceptions of the impact of the strategies that have been carried out.

Discussions

Strategic management in educational institutions functions as a systematic framework that guides the direction of school policies. This approach encompasses the formulation of long-term vision and mission, the implementation of educational programs, and continuous evaluation of goal achievement. The application of such strategies holds significant potential in supporting the integrated development of student character and digital literacy. Effective managerial roles enable all aspects of education to align with character values and 21st-century skills. Character education occupies a fundamental position in the educational process. Values such as responsibility, honesty, discipline, and cooperation must be instilled through a continuous and well-planned pedagogical approach. The internalization of these values requires the support of coherent school policies and strategic planning to ensure they become embedded in student behavior.

The involvement of all school elements from teachers to principals is a decisive factor in the successful implementation of character values in daily school life. Meanwhile, digital literacy skills have become essential in modern society. Mastery of technology must extend beyond operational capabilities to include critical thinking, the ability to filter valid information, and ethical awareness in digital interactions. Without the foundation of character education, the strengthening of digital literacy risks misuse, such as the spread of misinformation, ethical violations in online spaces, and moral

degradation. Integrating character education and digital literacy requires a carefully crafted managerial approach. Strategies such as project-based learning, the development of thematic curricula, and the utilization of technology as an educational tool can reinforce both dimensions simultaneously. The role of strategic management lies in the school's capacity to formulate policies that bridge technological competence with moral values.

Findings from SMK Negeri 1 Kapuas Murung demonstrate that a well-directed strategy can cultivate a school culture that is both adaptive and value-driven. Students have shown increased discipline and the ability to utilize technology productively. The active involvement of the school principal in designing value-based policies, along with consistent program implementation, are key indicators of successful strategic management. These findings confirm that strategic management acts as the central axis in integrating character education and digital literacy. The two are not separate entities; rather, they mutually reinforce and support one another in shaping a generation that is morally grounded, digitally competent, and prepared to face future challenges with dignity and responsibility.

Conclusion

This study demonstrates that strategic management plays a highly significant role in strengthening character education and enhancing students' digital literacy in the context of vocational high schools. At SMK Negeri 1 Kapuas Murung, strategic management is implemented through well-planned programming, targeted execution of educational initiatives, and systematic evaluation of activities that support character formation and digital literacy development. The school not only provides digital-based learning facilities and media, but also fosters character values through integrated academic and non-academic programs. The findings reveal that the effectiveness of these strategies is largely determined by strong school leadership, active teacher engagement, and a supportive school culture. The integration of character education and digital literacy within a single strategic management framework has proven effective in creating a learning environment that is more adaptive to 21st-century challenges. As a result, students are not only technologically skilled, but also equipped with ethics, social responsibility, and critical thinking abilities—qualities that form a crucial foundation for both personal development and professional success.

References

Ary Irawan, M., Faqih, M., & Baiq Rohiyatun, dan. (2014). Fakultas Ilmu Pendidikan IKIP Mataram IMPLEMENTASI MANAJEMEN STRATEGIK PENDIDIKAN KARAKTER DI SMPN 2 MATARAM. In *Jurnal Paedagogy* (Vol. 1).

Cahyani, D. R. S., & Miyono, N. (2024). Evaluasi Program Teaching Factory dalam Membentuk Budaya Mutu di SMK. *Jurnal Inovasi Pembelajaran Di Sekolah*, 5(1), 062–070. <https://doi.org/10.51874/jips.v5i1.221>

Edo Prabowo. (2021). *MANAJEMEN STRATEGIK KEPALA SEKOLAH DALAM PELAKSANAAN DAN PERAN KEPALA SEKOLAH DALAM MENINGKATKAN NILAI KELULUSAN SISWA/I DI SMP NEGERI 1 PERCUT SEI TUAN KABUPATEN DELI SERDANG*.

Firman. (2024). Inovasi dalam manajemen pendidikan islam untuk meningkatkan kualitas pembelajaran di era pendidikan digital. *Jurnal review pendidikan dan pengajaran*, 7, 4–6. <https://doi.org/P-2655-710Xe-ISSN2655-6022>

Fuad, M., Metarum, H., & Majid, A. (2021). Manajemen Strategis Supervisi Kepala Sekolah dalam Membangun Pendidikan Karakter di Madrasah Ibtidaiyah Swasta. In *Website: Journal* (Vol. 7, Issue 1). <https://www.pikiran-rakyat.com/pendidikan/pr-01289661/7-dari-10-siswa-pernah-alami->

Haryana, E. (2018). *Number 1 Indonesian Journal of Education Management and Administration Review* (Vol. 2).

Hilda Yunita wono, Novaldo, & Fitriani. (2023). *Media Sosial, Literasi Digital, Dan Inovasi Bisnis Trikotomi Baru Dalam Manajemen Strategi*.

Nurhadi, A. (2020). *IMPLEMENTASI MANAJEMEN STRATEGI BERBASIS PEMBIASAAN DALAM MENUMBUHKAN KARAKTER RELIGIUS SISWA*. 3(1). https://al-afkar.com/index.php/Afkar_Jurnal/issue/view/5

Supriani, Y. (2024). PERAN MANAJEMEN STRATEGI DALAM MENINGKATKAN LITERASI DAN NUMERASI. In *Jurnal Tahsinia* (Vol. 5, Issue 7).

Bintoro. (2023). *MANAJEMEN STRATEGI DALAM PENGEMBANGAN BUDAYA LITERASI DI SMA MUHAMMADIYAH PALOPO*. Allen Lane.

Dewi, N. L., & Saputra, H. (2021). Manajemen strategik kepala sekolah dalam penguatan karakter siswa. *Jurnal Manajemen Pendidikan*, 12(3), 233–244. <https://doi.org/10.17509/jmp.v12i3.42321>

Hamid, S., & Lestari, M. (2023). Digital literacy and character education: A synergy in the digital era. *Journal of Educational Research and Innovation*, 11(2), 102–114. <https://doi.org/10.31004/jeri.v11i2.11234>

Hasanah, U., & Widodo, S. (2021). Strategi sekolah dalam penguatan literasi digital siswa. *Jurnal Ilmiah Teknologi Pendidikan*, 24(1), 34–41. <https://doi.org/10.23887/jitp.v24i1.34022>

Lutfiana, D., & Wahyuni, E. (2020). Karakter dan literasi digital dalam pembelajaran daring: Studi kasus selama pandemi. *Jurnal Pendidikan Indonesia*, 9(3), 304–311. <https://doi.org/10.23887/jpi-undiksha.v9i3.30213>

Mahfud, C., & Prasetyo, E. (2022). Character education through digital platforms in vocational schools. *Journal of Moral Education*, 51(1), 77–89. <https://doi.org/10.1080/03057240.2021.1918310>

Pranata, Y., & Susanto, A. (2021). Peran manajemen strategik dalam membentuk budaya sekolah berkarakter. *Jurnal Administrasi Pendidikan*, 28(2), 142–153. <https://doi.org/10.17977/um027v28i22021p142>

Putri, S., & Hidayat, D. (2023). Digital literacy competency of vocational school students in Indonesia. *Jurnal Pendidikan Vokasi*, 13(1), 1–9. <https://doi.org/10.21831/jpv.v13i1.51320>

Rachmawati, R., & Maulana, A. (2022). Implementasi pendidikan karakter melalui strategi sekolah terpadu. *Jurnal Ilmu Pendidikan*, 19(4), 287–294. <https://doi.org/10.17977/jip.v19i4.12123>

Safitri, D., & Haq, M. F. (2022). Strategi manajerial kepala sekolah dalam membangun integritas siswa. *Jurnal Kepemimpinan dan Manajemen Sekolah*, 4(2), 95–107. <https://doi.org/10.17509/jkms.v4i2.45533>

Wahab, A. S., & Zainuddin, M. (2022). Peran literasi digital dalam penguatan karakter siswa era revolusi industri 4.0. *Jurnal Pendidikan Karakter*, 12(2), 168–180. <https://doi.org/10.21831/jpk.v12i2.47591>

Yuliana, S. (2023). Tantangan manajemen pendidikan di era digital. *Jurnal Administrasi dan Kependidikan*, 5(1), 56–65. <https://doi.org/10.21009/jak.051.07>