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Digital Literacy Management to Increase Student Reading Interest at SMA Negeri 1 Banggai

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Abstract

The increasing use of digital technology by students has not been adequately oriented toward literacy activities, but is instead dominated by non-academic uses such as social media, digital entertainment, and online games. This study aims to describe: (1) the preparation of digital literacy initiatives to increase students' reading interest; (2) strategies for implementing digital literacy to enhance students' reading interest; (3) assessment practices for digital literacy in relation to reading interest at SMA Negeri 1 Banggai; and (4) the sustainability of the digital literacy program at SMA Negeri 1 Banggai. Employing a qualitative approach with a case study design, the research was conducted at SMA Negeri 1 Banggai using observation, interviews, and document analysis, with data processed through an interactive data analysis model. The findings show that: (1) digital literacy preparation begins with analyzing initial needs, formulating objectives and programs, providing facilities and infrastructure, organizing implementation, and planning teacher competency development; (2) digital literacy implementation strategies to foster reading interest include the use of digital media and reading resources that are more engaging, interactive, and easily accessible; (3) digital literacy assessment is conducted reflectively and continuously within learning activities;

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and (4) evaluation results are used as the basis for program improvement and strengthening, including expanding digital reading collections, regulating device use, and reinforcing support for digital literacy implementation in classrooms and the school library. The study concludes that well-managed digital literacy programs can systematically enhance students' reading interest when supported by adequate preparation, thoughtful implementation strategies, continuous assessment, and sustained institutional commitment.

Keywords: Digital Literacy; Reading Interest; School Program Management; Case Study; Senior High School Students

INTRODUCTION

The development of digital technology has brought fundamental changes to the world of education, particularly in how students access and utilize information. Literacy in the 21st century is no longer understood simply as the ability to read and write conventionally, but rather encompasses the ability to use digital technology to access, evaluate, and utilize information critically, creatively, and ethically. Jones, (2018) emphasized that digital literacy is a key foundation for building a knowledge society, emphasizing not only technical aspects but also the cognitive and social dimensions of digital information use.

Although digital literacy has great potential to support learning, Indonesian students' reading literacy remains relatively low. The 2018 PISA results showed Indonesia's reading literacy score of 371, far below the OECD average of 487 (Pisa, 2019), In PISA 2022, this score declined again to 359. This data indicates that the ability to understand, analyze, and integrate written information remains a serious problem. Digital literacy is not a source of distraction in learning, but can be an effective strategy to increase students' interest in reading if managed systematically at the school level.

However, previous studies have been limited to aspects of individual student abilities, while studies examining digital literacy management as a school institutional program including planning, implementation, assessment, and sustainability are still very limited (Suwana et al., 2020; Haris et al., 2022; Ananyi & Ololube, 2023). According to Ananyi & Ololube, (2023) digital literacy management strategies can be broken down into three main stages that align with strategic management functions, namely: 1) Planning

Strategy, which includes determining the vision, mission, objectives, work programs, and providing adequate digital infrastructure; 2) Implementation Strategy, which includes integrating digital technology into learning, e-book-based reading habits, digital library management, and teacher involvement in guiding students; and 3) Evaluation and Optimization Strategy, which includes monitoring the effectiveness of digital literacy programs, identifying obstacles and enablers, and continuous improvement efforts to increase student reading interest. Thus, a good digital literacy management strategy not only emphasizes the provision of technology, but also building a sustainable literacy ecosystem. Due to current technological developments, a good understanding is required in managing the information needed by the community; 4) Visual literacy, an advanced understanding of media literacy and technological literacy, which develops learning abilities and needs by utilizing visual and audiovisual materials critically and with dignity. The unstoppable interpretation of visual materials, whether in print, auditory, or digital form a combination of the three called multimodal text needs to be managed well. Elfert et al., (2025) emphasized that a reading culture not only improves academic achievement but also fosters empathy, creativity, and analytical skills, which are essential in this challenging global era. Regular reading helps students develop the ability to analyze information in depth, broaden their perspectives, and build a richer understanding of various topics. According to Mutadin et al., (2024), reading interest is defined as an individual's tendency to read due to psychological drives, such as curiosity, pleasure, or the need to understand a particular topic. Furthermore, Bangsawan, (2024) defines reading interest as a psychological process involving a dynamic interaction between the reader, the text, and the social context.

Furthermore, Hidayat et al., (2021) describe reading interest as a combination of motivation, emotion, and attitude that drives individuals to read consistently. They emphasize that reading interest can be measured through indicators such as reading frequency, the type of reading material chosen, and the level of emotional involvement during the reading process. Theoretically, this study is based on the concept of educational management, which includes the functions of planning, organizing, implementing, and monitoring (Ananyi & Ololube, 2023), as well as the concept of digital literacy, which includes information literacy, media literacy, and technological literacy. The novelty of this study lies in its focus on digital literacy management as a strategy to increase students' reading interest, which is analyzed comprehensively in the context of a high school in a semi-urban area, namely SMA Negeri 1 Banggai.

The uniqueness of this research lies in the study of digital literacy as a school institutional program that is systematically managed to increase students' interest in reading, by taking the context of public senior high schools in semi-urban areas that have limited infrastructure and a reading culture that is not yet strong, thus providing an empirical picture that is contextual and relevant to the real conditions of most schools in Indonesia. Based on this description, this study focuses on the management of digital literacy in increasing students' interest in reading, which includes: 1) digital literacy preparation, 2) digital literacy implementation strategies, 3) digital literacy assessment, and 4) sustainability of the digital literacy program. The purpose of this study is to describe in depth the management of digital literacy at SMA Negeri 1 Banggai and analyze its contribution in increasing students' interest in reading.

METHODS

This research employed a qualitative method with a descriptive qualitative approach and a case study design. Informants were selected using purposive sampling, considering the relevance of their roles and direct involvement in digital literacy management. The data sources were the principal, the vice principal for curriculum, the literacy management teacher or librarian, subject teachers, and students.

In this study, the researcher acted as the primary instrument. Data collection utilized semi-structured interview guidelines, observation sheets, and documentation. The data collection technique utilized triangulation methods: 1) Participatory observation; 2) In-depth interviews; and 3) Documentation study.

Data analysis was conducted interactively and occurred concurrently with the data collection process, including: 1) Data reduction, by selecting and focusing data relevant to the research objectives; 2) Data presentation, in the form of descriptive narratives, matrices, and thematic tables to facilitate pattern identification; and 3) Conclusion drawing and verification, through data interpretation, which was repeatedly verified using source and method triangulation until credible findings were obtained.

RESULTS

Based on the research results, several main findings are: 1) digital literacy preparation in increasing students' interest in reading; 2) Digital literacy implementation strategies in increasing students' interest in reading; 3) Assessment of the implementation of digital literacy in increasing students' interest in reading; and 4) Sustainability of the digital literacy program. These findings were obtained from an in-depth analysis of real practices in the field and are categorized according to the following research sub-focuses:

1. Digital Literacy Preparation to Increase Student Reading Interest

Based on research findings, digital literacy preparation also includes an initial needs analysis, digital literacy objectives and programs, planning of facilities and infrastructure, organizing and planning teacher competency development. These findings confirm that schools' success in achieving digital literacy is determined not only by technology but also by the readiness of human resources as the primary implementers. Overall, the research findings indicate that digital literacy planning in both schools has fulfilled the elements of policy, program, facilities, and human resources. However, the planning is still in the stage of strengthening capacity and refining supporting facilities for optimal implementation. The research findings indicate that digital literacy preparation stems from the school's institutional awareness of changing student learning characteristics in learning, but rather serves as an adaptive strategy for the school to analyze declining student reading interest. The school understands digital literacy as part of a broader literacy culture. These findings indicate that the school does not limit literacy to reading skills but rather expands it to the ability to access, understand, and utilize digital information meaningfully. This indicates a shift in the literacy paradigm at the school level.

The establishment of digital literacy as an official school policy is a significant finding of this study. The existence of formal documents such as school work programs and School Literacy Team Decrees confirms that digital literacy planning is carried out systematically and structured, not solely based on personal initiative. This study found that the principal plays a strategic role as a policymaker and primary director in digital literacy planning. The involvement of the vice principal for curriculum, teachers, the literacy team, and the librarian in the planning indicates that digital literacy is designed through a collaborative approach. This finding indicates the school's efforts to build a sense of shared ownership of the digital literacy program. The integration of digital literacy into lesson

plans and open modules is one of the key findings that distinguishes the planning in these two schools from incidental literacy practices. Digital literacy is not intended as an additional activity, but as an integral part of learning. The digital literacy program designed by the school is contextual and applicable, such as 15 minutes of digital reading and the use of bold reading sources for learning assignments. These findings indicate that digital literacy planning is aimed at developing reading habits, not simply meeting program targets. In terms of facilities and infrastructure, the study found that the availability of digital libraries and internet access have been part of the planning, although still facing limitations in devices and collections. This condition shows a gap between the ideals of planning and the reality of resources.

2. Digital Literacy Implementation Strategies to Increase Student Reading Interest

Based on research findings, digital literacy implementation strategies to increase student reading interest include integrating digital literacy into classroom learning, utilizing e-books, digital articles, and learning platforms, involving teachers, providing technical assistance by teachers and librarians, implementing digital literacy through assignments and discussions, and utilizing the school's digital library. Research findings indicate that digital literacy implementation is integrated with classroom learning. Digital literacy is not isolated as a separate activity, but rather becomes part of students' learning routines. Teachers are key actors in implementing digital literacy. A dedicated digital literacy schedule actually strengthens the program's integration into learning. Observations revealed that digital literacy practices in the classroom are taking place in real-life situations, such as reading e-books before discussions.

The teacher's role as a facilitator appears dominant in the implementation of digital literacy. Teachers not only provide instructions but also assist students directly, particularly in overcoming technical challenges in using digital media. Librarian support is a key finding in the implementation of digital literacy. Librarians not only provide services but also act as digital literacy mentors for students, particularly in selecting and accessing digital reading materials. Student participation in digital literacy activities is quite good, especially when digital literacy is linked to learning assignments. The implementation of digital literacy in the library shows positive dynamics. Observations indicate an increase in student activity in utilizing digital facilities, especially after receiving guidance from teachers and librarians.

3. Assessment of Digital Literacy Implementation in Increasing Student Reading Interest

Based on research findings, the assessment of digital literacy implementation in increasing student reading interest includes digital literacy program evaluation meetings, academic supervision by the principal and vice principal, analysis of student participation and reading habits, identification of obstacles (devices, networks, human resources), and reflection on the effectiveness of program implementation. Research findings indicate that literacy evaluation is conducted to ensure that digital literacy does not stop at the implementation level but produces a real impact. Evaluation is conducted through formal mechanisms such as evaluation meetings, literacy team reports, and academic supervision.

The principal and vice principal for curriculum have a central role in the evaluation process. These findings confirm that digital literacy evaluation is a managerial responsibility, not merely a technical task of the literacy team. The evaluation indicators used focus on student participation, digital reading frequency, and changes in reading habits. The study found that digital literacy has a positive impact on student reading interest, particularly in the learning context. Students become more accustomed to accessing digital reading as a learning resource. However, this increase in reading interest is not evenly distributed across all students. Follow-up to the evaluation results is carried out through expanding digital collections, regulating device use, and training teachers.

4. Sustainability of the Digital Literacy Program

Based on research findings, the sustainability of the digital literacy program includes establishing program follow-up and strengthening school support, strengthening classroom learning, developing a digital library, and integrating it into the curriculum for learning practices. Research findings indicate that digital literacy program follow-up is implemented systematically and in a planned manner, using evaluation results as the basis for managerial decision-making. Schools do not position evaluation as an administrative activity, but rather as a basis for program improvement and strengthening, such as expanding the digital reading collection, regulating device use, and strengthening support for digital literacy implementation in the classroom and library.

This study found that the results of the digital literacy program evaluation are followed up through adjustments to classroom learning strategies, particularly in the selection of digital reading materials, student mentoring methods, and strengthening the

role of teachers as digital literacy facilitators. Teachers not only direct students to read digital resources but also actively assist and follow up reading activities with learning discussions. The findings indicate that school libraries play a strategic role in the follow-up of the digital literacy program. The evaluation results encourage strengthening digital library services through expanding the reading collection, improving mentoring services, and the active involvement of librarians in helping students access and select relevant digital reading materials. Libraries serve not only as facilities but also as centers for digital literacy mentoring. Research has found that digital literacy follow-up extends beyond technical aspects to include pedagogical and curricular areas. Schools use evaluation results to assess and strengthen the integration of digital literacy into cross-subject learning. Teachers are actively involved in evaluation and professional development forums to adapt digital literacy-based learning practices. Research findings indicate that digital literacy program follow-up has a positive impact on ease of reading access and increased student reading activity. However, the sustainability of student reading habits is still heavily influenced by teacher direction and assignments. This indicates that digital literacy has not yet fully developed as an independent habit for students, requiring consistent mentoring.

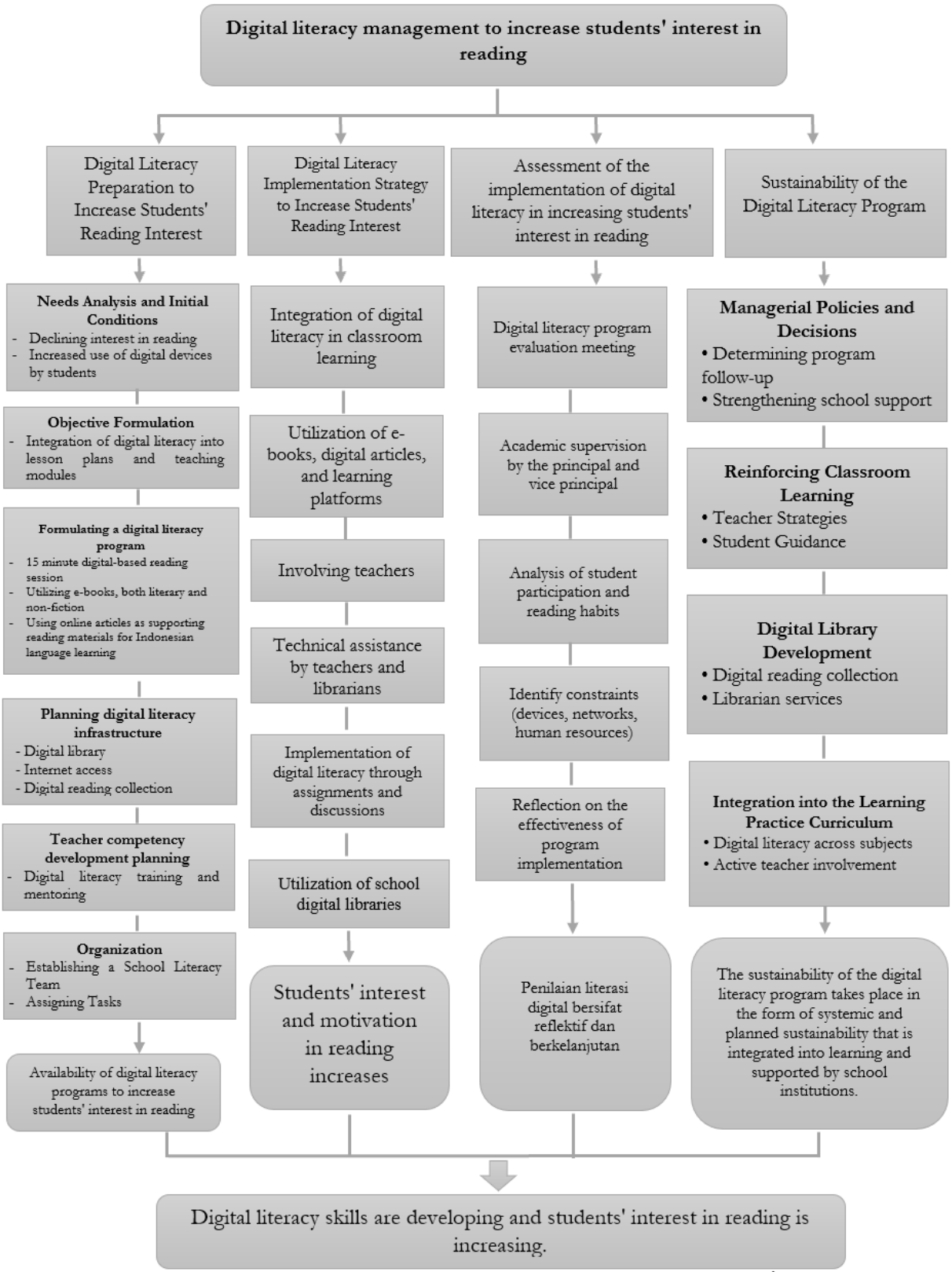

Figure 1. Context diagram of digital literacy management in increasing students' interest in reading at SMA Negeri 1 Banggai

Figure 1 shows that digital literacy management as an integrated system to increase student reading interest. This program begins with a needs analysis based on initial conditions, namely declining reading interest and increasing student use of digital devices. Next, the school undertakes a preparatory phase by establishing a literacy team, planning teacher competency development, and providing supporting facilities such as a digital library, internet access, and a digital reading collection.

During the implementation phase, digital literacy is integrated into learning through digital-based reading activities, the use of e-books and online articles, assignments, and class discussions with teacher and librarian support. The evaluation phase is conducted reflectively and continuously through program evaluation meetings, student participation analysis, and academic supervision. This entire process is expected to result in increased digital literacy skills and student reading interest and ensure the sustainability of the program's integration into learning.

DISCUSSION

Analysis of Research Results

The results of this study indicate that digital literacy management at SMA Negeri 1 Banggai is systematic and sustainable, spanning four main stages: planning, implementation, evaluation, and program follow-up. During the planning stage, digital literacy was positioned as an adaptive strategy for the school in responding to changes in student learning characteristics in the digital era. The establishment of formal policies through the school's work program and the Literacy Team Decree demonstrates that digital literacy is not viewed as an incidental activity, but rather as an integral part of the school's literacy culture.

The research findings indicate that literacy planning stems from the school's institutional awareness of changes in student learning characteristics in the digital era. This awareness aligns with Pisa, (2019) perspective, which states that digital transformation in education requires schools to adapt their literacy approach to the characteristics of the digital native generation, who are more familiar with technology than conventional print media.

Digital literacy, positioned as an adaptive school strategy, also reinforces the concept of 21st-century literacy. According to Carney, (2022) digital literacy is part of multiple literacies, encompassing the ability to access, evaluate, and critically utilize information through digital media. The findings of this study indicate that schools have adopted this paradigm, viewing digital literacy as an integral part of a culture of literacy, not simply technical skills in using devices. The establishment of digital literacy as an official school policy through work programs and the School Literacy Team Decree demonstrates systematic and structured planning. This aligns with the findings of Kurnia & Wijayanto, (2020) who emphasized that the success of digital literacy programs in schools is strongly influenced by the strength of institutional policies and regulatory support from school leaders. The role of the principal as the primary policymaker and director in digital literacy planning is also a significant finding. Principal leadership in this context reflects the concept of instructional leadership proposed by Hallinger et al., (2020) in which the principal plays an active role in directing learning innovation and strengthening a culture of literacy. Visionary leadership has been shown to strengthen the school community's commitment to implementing digital literacy.

The involvement of various school elements, including the vice principal for curriculum, teachers, the literacy team, and the librarian, demonstrates that digital literacy planning is carried out collaboratively. This finding aligns with research by Rahmawati, (2023) who stated that a collaborative approach to digital literacy management can increase a sense of shared ownership of the program and strengthen implementation consistency at the classroom level. Cross-role collaboration also allows for more realistic planning tailored to the needs and conditions of the school. The integration of digital literacy into lesson plans and teaching modules is one of the planning's strengths. This aligns with research by Hidayati, (2025) who emphasized that digital literacy will be more effective if integrated directly into lesson planning, rather than placed as an additional activity. This integration allows digital literacy to become part of a sustainable and meaningful learning process for students.

Contextual digital literacy programs, such as 15-minute digital reading sessions and the use of online reading resources for learning assignments, demonstrate the school's focus on developing reading habits. According to Guthrie & Wigfield, (2000), integrated reading habits within academic activities are more effective in increasing reading interest than ceremonial literacy programs. The findings of this study reinforce the view that digital

literacy needs to be designed in an applicable and relevant manner to students' learning needs. In terms of facilities and infrastructure, the research findings indicate that the availability of digital libraries and internet access has been part of the planning, despite still facing limitations in devices and collections. This condition aligns with the findings of Kurniawan & Sarah, (2023) who stated that the digital infrastructure gap remains a major challenge in implementing digital literacy in secondary schools, especially in non-urban areas. Digital literacy planning that includes teacher competency development demonstrates the school's understanding that technology cannot stand alone without human resource readiness. This aligns with the concept of digital pedagogical competence proposed by Redecker & Punie, (2017), who emphasize that the success of digital literacy is largely determined by teachers' ability to integrate technology pedagogically, not merely technically.

During the implementation phase, digital literacy is integrated directly into classroom learning processes and library services. This integration enables digital literacy to become a contextual and sustainable learning practice. The role of teachers as facilitators and mentors, along with the support of librarians as strategic partners, has been shown to strengthen student engagement in digital reading activities. However, the intensity of digital literacy implementation varies across classes, indicating a dependence on teacher competence and initiative. Research findings indicate that digital literacy implementation at SMA Negeri 1 Banggai is integrated with classroom learning. Digital literacy is not positioned as an additional or separate activity, but rather as part of the daily learning routine. This finding aligns with Carney, (2022) perspective, which emphasizes that effective digital literacy must be integrated into the teaching and learning process to have a real impact on students' learning habits and reading interests. The integration of digital literacy into learning indicates that both schools have implemented an embedded literacy approach. According to Hobbs & Coiro, (2019) and supported by Pisa, (2019), digital literacy becomes more meaningful when directly embedded in the learning context, as students read not only to fulfill program requirements but also to support their understanding of the subject matter. The findings of this study demonstrate that the practice of reading e-books before discussions is a concrete form of this integration.

The absence of a specific digital literacy schedule actually reinforces the program's integration into the learning structure. This finding supports research by Wulandari et al., (2025) which states that literacy that is not restricted by specific time frames tends to be more sustainable because it becomes part of the learning culture. However, the variation in

intensity between classes, as found in this study, indicates a high dependence on teacher initiative and competence. This reinforces Bush, (2025) view that the success of learning innovations is heavily influenced by implementing actors at the classroom level.

The teacher's role as a key actor in the implementation of digital literacy appears to be very dominant. Teachers not only provide instruction but also act as facilitators and mentors for students in utilizing digital reading resources. These findings align with the concept of digital pedagogy proposed by Redecker & Punie, (2017), who assert that digital literacy is not solely about technology use but also about teachers' ability to guide students in critical thinking about digital information. Teacher guidance in overcoming technical challenges in using digital media demonstrates that implementing digital literacy requires direct and ongoing interaction. This is reinforced by research by Adnan et al., (2024) which states that teacher pedagogical support is a determining factor in the success of technology integration in learning. Without adequate guidance, digital literacy has the potential to become merely a technical activity without pedagogical meaning.

Collaboration between teachers and librarians has been shown to increase students' use of digital learning resources. Student participation in digital literacy activities is quite good, especially when linked to learning assignments. These findings indicate that external motivation remains the primary driver of student engagement. This aligns with the learning motivation theory proposed by Ryan & Deci, (2017), which states that extrinsic motivation still plays a significant role in driving initial student engagement, particularly in task-based learning contexts. However, the reliance on external motivation suggests that internalization of digital reading interest still needs to be strengthened.

Variations in student engagement levels in digital literacy are influenced by differences in digital literacy skills, device ownership, and internet connection quality. These findings reinforce research by Kurniawan & Sarah, (2023) which states that disparities in technology access remain a major challenge in implementing digital literacy in secondary schools, particularly in areas with limited infrastructure. This situation demonstrates that digital literacy is not only a pedagogical issue, but also a structural one.

The implementation of digital literacy in libraries has shown positive dynamics. The increase in student activity in utilizing digital facilities after receiving guidance from teachers and librarians demonstrates the importance of synergy between school elements. These findings align with research by Supriyati & Antikasari, (2025) which asserts that

school libraries can become centers of digital literacy if actively managed and integrated with classroom learning.

The digital literacy evaluation phase is conducted in a reflective and institutionalized manner through evaluation meetings, academic supervision, and literacy team reports. The evaluation emphasizes changes in reading behavior and student participation rather than solely quantitative outcomes. The findings indicate that digital literacy has a positive impact on student reading interest, particularly in the context of task-based learning. However, the increase in reading interest is uneven and is still heavily influenced by external stimuli such as teacher direction and academic demands.

The research findings indicate that digital literacy evaluation is viewed as an integral part of the digital literacy program management cycle at SMA Negeri 1 Banggai. Evaluation is not merely interpreted as a final activity, but as a reflective process to ensure that digital literacy implementation has a tangible impact on student reading interest. This finding aligns with the concept of continuous improvement in educational management, which places evaluation as the basis for decision-making and continuous improvement (Stufflebeam & Zhang, 2017).

The implementation of evaluations through formal mechanisms such as evaluation meetings, literacy team reports, and academic supervision demonstrates that digital literacy evaluation has been integrated into the school management system. This aligns with the findings of Pisa, (2019) which emphasized that the success of literacy programs in schools is significantly influenced by the existence of a structured and institutionalized evaluation system. Formal evaluations enable schools to obtain more objective and accountable data regarding the effectiveness of digital literacy programs.

The central role of the principal and vice principal for curriculum in the evaluation process confirms that digital literacy evaluation is a managerial responsibility. This finding supports instructional leadership theory, which states that principals play a strategic role in directing, monitoring, and evaluating learning innovations in schools (Hallinger et al., 2020). The involvement of school leaders strengthens the legitimacy of the evaluation and ensures that the results are followed up in school policies and programs. The evaluation indicators used emphasize student participation, frequency of digital reading, and changes in reading habits rather than solely quantitative outcomes. This finding aligns with the process-based and behavior-based evaluation approach proposed by Redecker & Punie,

(2017), who stated that the impact of digital literacy is more accurately measured through changes in student learning practices and reading habits. The focus on behavioral aspects indicates that schools view digital literacy as a long-term habituation process.

The results show that digital literacy has a positive impact on students' reading interest, particularly in the learning context. Students become more accustomed to accessing digital reading materials as a learning resource. These findings reinforce the research of Siddiq et al., (2016) which stated that repeated exposure to digital reading resources in learning can increase student engagement and expand literacy resources. However, the increase in reading interest was not evenly distributed across all students, indicating challenges in equitably distributing the program's impact.

The reliance of digital literacy on teacher incentives and the demands of academic assignments indicates that students' internalization of reading interest has not yet fully developed. This aligns with Ryan & Deci, (2017) learning motivation theory, which explains that extrinsic motivation is often the initial trigger, but pedagogical strategies to build intrinsic motivation are necessary. These findings suggest that digital literacy evaluation needs to focus not only on the frequency of activities but also on the quality of student engagement.

Follow-up evaluation results through additions to digital collections, device usage management, and teacher training demonstrate the school's commitment to continuous improvement. These findings align with the concept of evaluation for improvement proposed by Stufflebeam & Zhang, (2017), which emphasizes that the primary value of evaluation lies in utilizing the results for program development. Teacher training as a follow-up to the evaluation also reinforces the finding that educator competence is a key factor in the success of digital literacy.

The sustainability of the digital literacy program is demonstrated through follow-up on evaluation results, such as expanding the digital reading collection, strengthening the role of the digital library, adjusting learning strategies, and developing teacher competencies. This demonstrates that the school utilizes evaluation as a basis for managerial and pedagogical decision-making, enabling digital literacy to develop as a dynamic and adaptive practice.

This is consistent with the concept of educational management, which places evaluation as an integral part of the planning-implementing-and-evaluating cycle (planning-

doing-checking-acting). In the context of digital literacy, evaluation not only measures outcomes but also serves as the basis for ongoing program development. Furthermore, literature studies indicate that effective educational management in digital literacy must include policy support, infrastructure, and strengthening the capacity of teachers as the primary drivers of the digital literacy program (Nurhidayati & Thaufani, 2025). Therefore, systemic follow-up, such as that found at SMA Negeri 1 Banggai, aligns with the demands of digital literacy management in contemporary education, emphasizing policy collaboration, evaluation, and professional development with teachers and school stakeholders.

Research findings indicate that program follow-up is also realized through adjustments to classroom learning strategies, particularly in the selection of digital reading materials and student mentoring. Teachers not only provide digital reading materials but also actively support students through integrated discussions and learning assignments.

These findings align with the theory of the teacher's role as a learning facilitator, particularly in the context of digital literacy. Teachers are no longer merely content transmitters, but leaders of the digital learning process, facilitating student engagement, critical thinking, and independent learning (Panggabean & Misykah, 2025). Research conducted by Panggabean & Misykah, (2025) also found that teachers' strategies as digital facilitators can significantly increase student engagement in literacy activities and encourage the development of digital literacy skills and independent learning. This aligns with the assertion that teachers play a crucial role in translating digital literacy policies into meaningful and contextual daily learning practices.

The findings suggest that digital libraries play a strategic role in the follow-up of digital literacy programs through the expansion of digital reading collections, improved support services, and the involvement of librarians. Libraries not only store resources but also serve as centers for digital literacy support for students. This aligns with research conducted by Tanipu et al., (2025) which shows that school libraries play a crucial role in supporting learning activities, both through the provision of digital learning resources and through active collaboration between librarians and teachers. Digital libraries can be strategic facilities that integrate quality reading resources with consultation services to improve the accessibility and relevance of reading materials for students. Thus, the role of digital libraries as digital literacy service centers is an effective practice and relevant to the

needs of 21st-century literacy development. This also demonstrates that digital literacy program follow-up is not solely the responsibility of teachers but involves the entire school ecosystem.

The research findings indicate that digital literacy follow-up encompasses both pedagogical and curricular domains: schools use evaluation results to strengthen the integration of digital literacy into cross-subject learning and in teacher professional development forums. This aligns with research conducted by Saifuddin & Putra, (2024) which emphasizes that digital literacy must be an integral part of the curriculum, not simply an additional activity. This integration includes digital literacy competencies in learning standards, instructional objectives, and learning assessments.

Recent findings indicate that digital literacy programs have a positive impact in the form of easier access to reading materials and increased student reading activity. However, independent reading habits have not yet fully developed because students are still heavily influenced by teacher direction and assignments. This is consistent with the results of research by Masdarita et al., (2025) which showed that digital literacy can encourage reading motivation and student engagement through engaging digital resources. However, independent reading as a learning habit still requires consistent guidance and learning strategies that instill student literacy initiatives. This obstacle underscores the importance of project-based learning strategies, social interactions, and the use of authentic digital content to encourage greater learning independence in students.

Literature Comparison

The findings of this study align with the views of Pisa, (2019) and Carney, (2022) who emphasized that digital literacy is a strategic necessity in 21st-century education and must be integrated into learning. The integration of digital literacy into lesson plans and teaching modules supports the concept of embedded literacy as proposed by Hobbs & Coiro, (2019), who stated that digital literacy will be more meaningful if directly embedded in the learning context. The principal's role in digital literacy planning and evaluation reinforces instructional leadership theory (Hallinger et al., 2020), in which school leaders serve as the primary drivers of learning innovation. Furthermore, the collaborative involvement of teachers and librarians aligns with the findings of Rahmawati, (2023) who emphasized the importance of shared ownership and cross-role partnerships in digital literacy management. The results of this study also confirm the findings of Redecker &

Punie, (2017) and Adnan et al., (2024) who stated that teacher pedagogical competence is a key factor in digital literacy success. Meanwhile, the infrastructure constraints and access gaps identified in this study are consistent with the findings of Kurniawan & Sarah, (2023) which showed that digital literacy is not only a pedagogical issue but also a structural one, particularly in non-urban areas.

Implications of Research Findings

The theoretical implications of this study indicate that digital literacy management needs to be understood as a comprehensive managerial and pedagogical process, not simply a matter of technological mastery. These findings reinforce the digital literacy model based on the educational management cycle (planning, implementation, evaluation, and follow-up) as a relevant approach in the secondary school context. Practically, this study provides implications for schools to strengthen digital literacy policies through formal legitimacy, cross-role collaboration, and the integration of digital literacy into learning across subjects. For teachers, these findings emphasize the importance of their role as digital literacy facilitators, focusing not only on technical aspects but also on developing students' reading interests and critical thinking. For library managers, these results demonstrate that digital libraries can function as strategic digital literacy centers if actively managed and integrated with learning.

Research Limitations

This study has several limitations. First, it was conducted in a single school, so the findings are not intended to be broadly generalized, but rather to provide in-depth contextual understanding. Second, the measurement of student reading interest in this study focused more on behavioral and participation indicators, thus not fully reflecting the dimensions of students' intrinsic reading motivation. Third, limited digital infrastructure and variations in teacher competency are external factors influencing the implementation of digital literacy, which can limit the equitable distribution of the program's impact. Nevertheless, these limitations do not diminish this study's contribution in providing a comprehensive overview of digital literacy management in secondary schools, particularly in non-urban areas, and can serve as a basis for further research with a broader scope of locations and methodological approaches.

CONCLUSION

This study concludes that digital literacy management at SMA Negeri 1 Banggai has been implemented systematically and sustainably through the stages of preparation, implementation, assessment, and program development. The preparation stage begins with analyzing initial needs, formulating objectives and programs, facilities and infrastructure, organizing, and planning teacher competency development. The strategy for implementing digital literacy to increase reading interest involves utilizing more engaging, interactive, and accessible digital media and reading resources. Digital literacy assessments are conducted reflectively and continuously. Evaluation results are used as a basis for program improvements and strengthening, such as expanding the digital reading collection, regulating device use, and strengthening support for digital literacy implementation in the classroom and library. These findings indicate that digital literacy can positively contribute to reading habits when managed in an integrated, collaborative manner, and based on continuous evaluation.

In terms of its contribution to knowledge, this research enriches digital literacy studies by positioning digital literacy as a comprehensive managerial and pedagogical practice at the school level. This research provides empirical evidence that managing digital literacy based on the educational management cycle (planning, implementation, assessment, and development) is a relevant approach for increasing student reading interest, particularly in secondary schools in non-urban contexts. Furthermore, these findings reinforce the perspective that the success of digital literacy is determined not only by technology, but also by school leadership, teacher competence, cross-role collaboration, and support from evaluation systems.

Future research is recommended to examine digital literacy using a quantitative or mixed-methods approach to more objectively measure the impact of digital literacy on students' reading interest and learning outcomes. Further research could also expand the context to different educational levels and regions, and explore more effective pedagogical strategies for building students' intrinsic motivation to read in digital environments.

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