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UTILIZING GOOGLE SITES TO IMPROVE READING LITERACY IN ELEMENTARY SCHOOLS

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Abstract
Reading comprehension is a fundamental skill that is essential for supporting the learning success of elementary school students. However, the implementation of reading instruction in Indonesia still faces various challenges, such as low reading interest, limited access to engaging learning materials, and the dominance of conventional teaching methods. This study aims to examine the role of digital learning media based on Google Site in enhancing elementary school students' reading comprehension skills. This study was conducted using the Systematic Literature Review (SLR) method on scientific articles published between 2015 and 2025. The PRISMA model was applied to ensure transparency and validity in the identification, screening, and inclusion of data. A total of 41 articles met the inclusion criteria and were analyzed using Braun and Clarke's six-phase thematic analysis. Data extraction was conducted through systematic coding of article content, focusing on the use of Google Sites to support reading instruction. The findings indicate that Google Site facilitates the presentation of multimodal and interactive materials, enhances student motivation and engagement, supports flexible and collaborative learning, and fosters critical and reflective thinking. These characteristics highlight the potential of Google Site as an effective digital learning platform to improve elementary students' reading skills. This study concludes that Google Site-based learning media has the potential to significantly improve reading comprehension skills if supported by appropriate pedagogical strategies and adequate teacher readiness and infrastructure.
Keywords: *reading comprehension; digital media; Google Site; interactive learning; elementary school*

Abstrak
Pemahaman membaca merupakan keterampilan dasar yang sangat penting untuk mendukung kesuksesan belajar siswa sekolah dasar. Namun, implementasi pengajaran membaca di Indonesia masih menghadapi berbagai tantangan, seperti minat membaca yang rendah, akses terbatas terhadap bahan pembelajaran yang menarik, dan dominasi metode pengajaran konvensional. Penelitian ini bertujuan untuk mengkaji peran media pembelajaran digital berbasis Google Site dalam meningkatkan keterampilan pemahaman membaca siswa sekolah dasar. Penelitian ini dilakukan menggunakan metode Systematic Literature Review (SLR) pada artikel ilmiah yang diterbitkan antara tahun 2015 dan 2025. Model PRISMA diterapkan untuk memastikan transparansi dan validitas dalam identifikasi, penyaringan, dan inklusi data. Sebanyak 41 artikel memenuhi kriteria inklusi dan dianalisis menggunakan analisis tematik enam fase Braun dan Clarke. Ekstraksi data dilakukan melalui pengkodean sistematis konten artikel, dengan fokus pada penggunaan Google Sites untuk mendukung pengajaran membaca. Temuan menunjukkan bahwa Google Sites memfasilitasi penyajian materi multimodal dan interaktif, meningkatkan motivasi dan keterlibatan siswa, mendukung pembelajaran fleksibel dan kolaboratif, serta mendorong pemikiran kritis dan reflektif. Karakteristik ini menyoroti potensi Google Sites sebagai platform pembelajaran digital yang efektif untuk meningkatkan keterampilan membaca siswa sekolah dasar. Studi ini menyimpulkan bahwa media pembelajaran berbasis Google Sites memiliki potensi untuk secara signifikan meningkatkan keterampilan pemahaman membaca jika didukung oleh strategi pedagogis yang tepat, kesiapan guru yang memadai, dan infrastruktur yang memadai.
Kata Kunci: membaca pemahaman; media digital; Google Site; pembelajaran interaktif

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Introduction

The ability to read comprehension is a basic skill that is very important in supporting the learning process of students in elementary school (Sari et al., 2021). Reading is not just spelling and pronouncing words, but involves higher-level thinking activities that include understanding the content of the text, drawing conclusions, and connecting information with experiences or knowledge that has been owned. Anderson and Pearson (1984) explain that reading comprehension is an interactive process between the reader and the text that aims to build meaning. In basic education, this ability is very influential on students' success in understanding various other subjects, as well as forming the basis for critical and analytical thinking. Without good reading comprehension skills, students will have difficulty in following conceptual and complex learning (Dihan et al., 2022). This is also supported by Dinamaryati's (2021) opinion that weakness in understanding text can also have an impact on overall low learning achievement. Thus, learning to read comprehension needs to be designed effectively from an early age in order to optimally support students' cognitive and academic development.

The Merdeka curriculum currently implemented in Indonesia emphasizes the importance of strengthening reading literacy as a foundation for mastering 21st-century competencies. According to Putri (2024), this curriculum provides more flexible space for teachers and students to explore meaningful and contextual learning, including through the use of digital technology. However, despite these progressive goals, reading literacy outcomes remain low. Based on the 2019 Program for International Student Assessment (PISA) report, Indonesian students' reading literacy skills are still below the average of OECD countries. This shows that many students still have difficulties in understanding the meaning of reading deeply and critically. This discrepancy indicates that the intended policy reforms have not yet translated effectively into classroom strategies and practices. This low ability is an indicator that the learning strategies implemented have not been fully successful in developing essential literacy skills (Jehadus et al., 2024). In addition, the lack of access to interesting learning resources and the use of varied learning media also reinforces this problem. Therefore, a gap persists between curriculum expectations and real classroom outcomes, highlighting the need for a more innovative and responsive approach to students' learning needs one of which is through the integration of digital media in reading learning.

Various challenges are faced in the implementation of reading comprehension learning in elementary schools. Among them are students' low interest in reading, limited interesting learning resources, and the use of teaching methods that are still dominated by conventional approaches such as lectures and practice questions (Wahyuningsih, 2020). This condition has an impact on low student engagement and shallow understanding of reading content. According to Widianti et al. (2024), the lack of a literacy culture at home and school also exacerbates this situation, making reading only a mechanical activity, not a process of meaning formation. In addition, the lack of technological support in learning to read causes learning methods to be less varied and less able to motivate students (Lidya et al., 2025). Teachers also often face time constraints to provide individualized attention to students with reading difficulties. These conditions demonstrate that conventional solutions such as teacher-centered lectures, repetitive drills, and printed textbooks are no longer sufficient to meet the complex literacy needs of today's students. Therefore, innovations in learning strategies are urgently needed to increase both students' interest and their ability in reading comprehension more effectively.

On the other hand, the development of information and communication technology has opened up great opportunities to improve the quality of learning, including in the aspect of reading literacy. Digital technology offers a more dynamic and interactive approach, which

allows teachers to deliver materials in various multimodal formats such as text, images, audio, video, and other interactive features. Shuja et al. (2019) state that multimodal-based digital media can increase learning motivation, cognitive engagement, and deeper understanding of concepts, especially for elementary school students. The use of technology also allows more personalized learning, so that it can adjust to the needs and abilities of each student (Arnadi et al., 2024). This is also in line with Dalu & Rohman's (2019) opinion that digital media can bridge the gap in access to learning resources, which has been an obstacle in some schools. Among the various digital platforms available, one promising tool that aligns with these needs is Google Site. This platform enables the integration of diverse learning materials into a single accessible interface, making it a potential medium for developing effective and engaging reading comprehension instruction. Thus, the integration of technology in reading learning is expected to create a more interesting and effective learning environment.

One digital platform that can be utilized in this context is Google Site, a web-based service that allows users to easily create and share interactive learning sites. Google Site allows the integration of various learning contents in one platform, such as reading texts, learning videos, quizzes, reference links, and collaborative features that encourage interaction between teachers and students (Nasir, 2024). The simple interface makes it easy to use by both teachers and students, even without deep technical background. Salsabila and Aslam (2022) mentioned that Google Site is effective in developing adaptive, interesting, and accessible teaching materials, especially in project-based or literacy learning. In addition, according to Febrian & Nasution (2024), the use of Google Site can increase students' learning independence because they can access materials anytime and anywhere. The collaborative feature also strengthens cooperation between students in understanding the material, so that the learning process becomes more active and participatory. Given its features and potential, this study focuses specifically on Google Site as a digital learning solution to support and enhance reading comprehension in elementary school students. Thus, Google Site not only facilitates the delivery of materials, but also supports the development of students' digital skills and information literacy as a whole.

Google Site also supports various learning formats, both online and offline (Ismawati et al., 2021). The real-time collaboration feature allows students to work in teams, share ideas, and get immediate feedback from the teacher. This is also in line with Santika's (2021) opinion that in the field of 21st century education, the ability to collaborate digitally is a fundamental skill that must be developed early on. By utilizing Google Site, teachers can encourage proactive student participation in learning activities, creating interactive and meaningful classroom dynamics. For elementary school students, interactive and relevant learning approaches are essential to maintain learning motivation (Ali et al., 2025). Google Site provides space for teachers to develop creativity in compiling materials that are relevant to students' needs. The combination of accessibility, flexibility and interactive features offered by this Platform makes it a strategic tool in creating learning experiences that are not only engaging, but also deep and meaningful for students' cognitive and affective development.

Several studies show that digital media such as Google Sites contribute positively to improved student engagement and learning outcomes. For example, Febrian and Nasution (2023) found that the use of Google Site in learning can encourage students to learn independently as well as collaboratively, and make it easier for teachers to manage and present material systematically. However, the focus of the research is still general and has not specifically examined how interactive features on Google Site can support elementary school

students' reading comprehension skills. For instance, Salsabila and Aslam (2022) focused on students' motivation in using Google Site in project-based learning, while Hidayat & Permana (2021) highlighted the improvement of student engagement and digital literacy skills through Google Site use, without specifically addressing reading comprehension processes. These studies demonstrate the potential of Google Site, but do not provide in-depth insights into how its features can be applied pedagogically to support literacy development. The research gap found is the lack of studies that deeply discuss the role of Google Site in the context of reading comprehension skills at the elementary school level. Most of the previous studies emphasized general outcomes such as motivation or engagement, rather than literacy-focused instructional design. In fact, reading comprehension is a fundamental aspect that requires a cognitive process-based learning approach and appropriate interactive media. The novelty of this study lies in its integrative approach—combining pedagogical strategies, digital media (Google Site), and the specific characteristics of elementary school learners. This research not only discusses the potential of Google Site's features, but also analyzes their integration in digital literacy learning, technology-based pedagogy, and age-appropriate learning practices.

By conducting a comprehensive literature review, this study aims to identify the extent to which Google Site-based digital learning media can contribute to improving reading comprehension skills of elementary school students. The results of this study are expected to be a reference for teachers, media developers, and future researchers in designing learning strategies that are more effective and in accordance with the demands of 21st century education.

Research Methods

This study employed the Systematic Literature Review (SLR) method to explore the role of Google Site-based digital learning media in improving reading comprehension skills of elementary school students. The SLR method was chosen because it allows researchers to systematically identify, evaluate, and synthesize findings from multiple relevant studies, thereby forming a strong conceptual and practical foundation (Erbara & Takdir, 2022). The review process was conducted from April to June 2025. The data sources consisted of national and international scientific articles published between 2015 and 2025. Articles were searched through four major academic databases: Google Scholar, DOAJ, Garuda, and SINTA. To ensure search accuracy and reproducibility, specific search keywords were used, such as: *"Google Site," "reading comprehension," "elementary school," "digital learning,"* and *"technology-based learning."* Boolean operators (e.g., AND, OR) were used to combine search terms based on the database structure. A pilot search was initially conducted on Google Scholar to evaluate the effectiveness of the selected keywords, and slight modifications were made to optimize article retrieval.

The article selection followed purposive sampling with the following criteria: articles must discuss digital learning media (especially Google Site), focus on reading comprehension skills, be relevant to the elementary school level, and be peer-reviewed empirical studies published between 2015 and 2025 in Indonesian or English. Articles were excluded if they were conceptual or opinion papers, theses, non-empirical publications, or studies focusing on other subjects unrelated to reading. The article selection process was carried out systematically using the PRISMA model (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) as developed by Moher et al. (2009) and updated by Page et al. (2021), which includes four stages: (1) Identification, searching articles using predefined keywords in selected databases, (2) Screening, filtering articles by reading titles and abstracts, (3) Eligibility, assessing the full text of selected articles, and (4) Inclusion, determining the final articles to be analyzed. In total, 328

articles were initially identified. After removing duplicates and applying screening and eligibility processes, 41 articles met the inclusion criteria and were used for further analysis.

The next step was the data extraction process, in which each selected article was examined to collect essential information. The data extracted included the name of the author(s), year of publication, research location or country, research objectives, methods used (qualitative, quantitative, or mixed methods), sample or participants, digital media or intervention details (especially related to Google Site), research outcomes, and key findings. The data extraction was conducted by the primary researcher and cross-validated by an independent reviewer to ensure consistency and minimize bias. To evaluate the quality of the selected articles, a quality appraisal was conducted based on the criteria adapted from the Joanna Briggs Institute (JBI). Each article was assessed based on its methodological rigor, including the clarity of research objectives, the suitability of the research design, data collection procedures, and the relevance of its findings to the topic. This appraisal was carried out independently by two reviewers to enhance objectivity. For data analysis, this study used a descriptive-thematic analysis technique. Thematic analysis was applied to identify patterns or themes that emerged across the selected studies. This process involved reading and re-reading the data, coding key concepts, grouping similar codes, and interpreting the overarching themes. The themes that emerged include the role of multimodal digital content, increased student engagement and motivation, collaborative learning practices, flexibility of access, and the integration of digital literacy in reading comprehension learning using Google Site. Finally, the results of the PRISMA-based selection process are presented narratively in the findings section to describe the flow of article identification, screening, and inclusion. This systematic procedure ensures that the review is transparent, comprehensive, and reliable in addressing the research focus. The following is Figure 1 of the stages of the PRISMA model in (Handayani, 2017), namely:

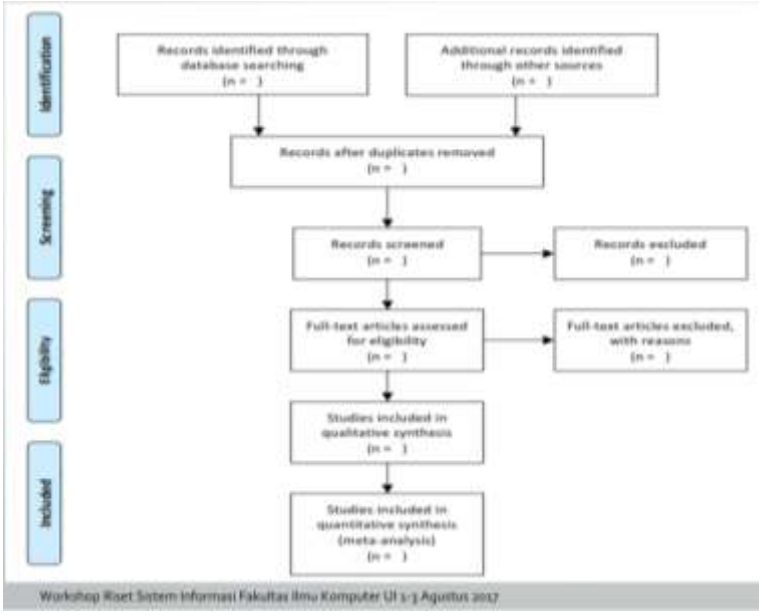

Figure 1. Stages of the PRISMA model

Result and Discussion

The implementation of reading comprehension learning in primary schools faces significant challenges that contribute to the low literacy achievement of students. Widianti et al.'s research (2024) revealed that low interest in reading, limited interesting learning resources,

and the dominance of conventional methods such as lectures and question exercises are the main factors. In addition, the lack of a literacy culture at home and school also worsens the condition, making reading activities only a mechanical activity without meaning. These conditions indicate the need for innovation in learning strategies that can significantly improve students' motivation and reading comprehension. The results of this study were also described through a Systematic Literature Review using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) model developed by Moher et al. (2009) and refined by Page et al. (2021). There are four main stages in the article selection process, which are described as follows. Identification, in this stage, researchers conducted a literature search from various databases such as Google Scholar, DOAJ, Garuda, Publish or Perish, and SINTA using keywords such as Google Site, digital learning media, reading ability, PRISMA model, and elementary school. From the initial search results, 230 articles were found that were potential for further review. Screening, the articles identified in the initial search were then screened by removing duplicates and selecting based on titles and abstracts. This process resulted in 96 articles that met the initial criteria and were proceeded to the full review stage. Eligibility, articles that passed the previous stage were read in full to ensure they were relevant to the research focus. The criteria used included topic relevance, methodology used, and relevance to the context of reading instruction in elementary schools. After this stage, 41 articles were deemed eligible. Included, the 41 articles were then analyzed using a descriptive-thematic approach. The analysis revealed that Google Site-based learning media positively contributed to improving students' reading comprehension skills, including learning motivation, independence, and critical thinking skills. This was achieved through the integration of Google Site's interactive features within a collaboratively designed and multimodal learning context.

In learning designed collaboratively and multimodally, the PRISMA model stages were used to systematically and transparently select articles (Fathullah & Anshori, 2025). This process aims to enhance the validity and reliability of literature reviews, particularly regarding adaptive learning innovations in response to contemporary developments. One key finding from the selection process indicates that advancements in information and communication technology (ICT) present a strategic opportunity to address various challenges in conventional learning. Digital learning media offers a more dynamic and interactive approach, allowing teachers to deliver materials in multimodal formats such as text, images, audio, video, and other interactive features that can stimulate various student learning styles (Arief & Ardhian, 2024). Research by Mustopa et al., (2024) that digital media not only increases student engagement, but also enriches deep learning experiences through strengthening cognitive and affective aspects. Thus, the integration of technology in reading learning is expected to create an interesting and effective learning environment.

One of the widely used digital platforms is Google Site, which provides web-based services to create and share interactive learning sites. Google Site allows the integration of various learning content such as text, video, quizzes, as well as collaborative features that encourage interaction between teachers and students (Vidiana et al., 2024). The study by Ekosantoso et al. (2025) that Google Site is effective in compiling adaptive and accessible materials, and is able to increase students' learning independence. Easy access to materials anytime and anywhere allows students to repeat learning according to their needs, which is very beneficial in the context of reading comprehension. In addition, Google Site's collaborative features strengthen cooperation between students and active interaction with teachers, important aspects in building literacy skills (Asrofi & Amin, 2024). With real-time discussion and feedback, students can share their interpretation of the reading content, which is crucial in the process of forming meaning

(Romadhon et al., 2025). This is in line with the findings of Damanik (2023) who stated that collaborative learning based on digital technology can significantly improve students' concept understanding and analytical skills.

The study by Sapriadi et al. (2025) also added that the use of Google Site can bridge the gap in access to learning resources, especially in schools that have limited facilities. By providing complete and interesting digital materials, Google Site helps overcome the obstacles of limited books or printed media that are often experienced by elementary schools in remote areas. This directly contributes to increased reading interest and student engagement in the learning process. However, the effectiveness of using Google Site is inseparable from the pedagogical strategies implemented by teachers. Pohan (2025) emphasizes the importance of active learning approaches that integrate digital technology with methods such as project-based learning, group discussion, and reflection. Digital media such as Google Site will be optimal when used in a learning context that emphasizes critical and reflective thinking processes, not just the presentation of material.

In addition, the challenges that still have to be faced include the readiness of teachers in managing and utilizing digital technology effectively. According to Lesasunanda & Malik (2024), there are still obstacles in the form of limited technological competence and time for teachers to prepare digital learning materials. Therefore, teacher training and mentoring are needed so that the utilization of Google Site can run optimally in improving students' reading comprehension skills. 21st century literacy, collaboration and digital communication skills are fundamental skills that must be developed early (Santika, 2021). Google Site supports collaborative learning with its real-time collaboration feature, which allows students to work in teams, share ideas and get immediate feedback. This not only improves reading literacy skills, but also students' social and digital skills, as demanded by the Merdeka curriculum and international education standards (Andrea et al., 2024). Research by Amellya & Khasanah (2021) also found that using Google Site as a learning medium can help students develop metacognitive skills in reading. In their experiment in grade IV elementary school, students were trained to make digital summaries and answer reflective questions through sites that they accessed independently. The results showed an increase in critical thinking skills and deep understanding of narrative texts. This strengthens the argument that Google Site is not only an information presentation tool, but also a reflective medium that can stimulate higher-order thinking skills.

In the research article of Bhagaskara et al., (2021) entitled "The Use of Google Sites Based WebQuest Media in Online Learning at MI Bilingual Roudlotul Jannah during the COVID-19 Pandemic". This research uses a descriptive qualitative approach. Data were collected through interviews, observations, and documentation to understand the application of WebQuest in the context of online learning at MI Bilingual Roudlotul Jannah. This article discusses the application of Google Sites-based WebQuest media as an innovative solution in distance learning during the COVID-19 pandemic. WebQuest is designed with menus such as Home, Introduction, Task, Process, Resources, Evaluation, and Conclusion, which aim to facilitate students' self-learning and improve their scientific attitude. The application of WebQuest is proven to be able to increase students' interest in learning, motivation, and scientific attitudes, while at the same time making it easier for parents to assist their children in learning from home. It is also able to integrate various media sources such as videos, texts, and links in one platform that is easy to access and use. Despite its effectiveness, there are major challenges such as the limited reading ability of students and the need for creativity from teachers in compiling

interesting and varied materials. The advantages of using WebQuest include its ability to facilitate access to learning anytime and anywhere, presenting material online that aids understanding from internet sources, and increasing student motivation and scientific attitudes. WebQuest also supports the online learning process with various interactive media. On the other hand, the main disadvantages are the limited reading ability of students which can hinder comprehension of instructions, the need for high creativity from teachers in developing interesting media, internet connection constraints, and the potential for boredom due to monotonous learning activities. WebQuest requires sufficient reading skills as students have to understand the written text and instructions presented in the platform. Students' limited reading ability can be a major obstacle in following the learning process independently through this media, so it requires special assistance and strategies so that all students can follow well. The results showed that the use of WebQuest based on Google Sites was able to increase students' interest in learning, motivation, and scientific attitude. This media facilitates access to learning anytime and anywhere, and helps students understand material from internet sources independently. In addition, WebQuest helps increase student engagement in the online learning process. However, there are obstacles such as unstable internet connection and monotony of learning activities that need to be overcome with innovation from the teacher. Recommendations from this study include the need for increased creativity and innovation from teachers in developing WebQuest media to make it more interesting and effective. Teachers are also advised to provide special assistance to students who have poor reading skills. The use of technology must be adjusted to the conditions of internet access and students' abilities so as not to cause obstacles. The development of varied and interactive media is also important to reduce boredom and increase the effectiveness of learning. In addition, training for teachers in creating interesting and effective WebQuest-based learning media is highly recommended to support successful implementation. In general, related articles and studies show that Google Sites-based WebQuest is an innovative and effective solution in supporting online learning during the pandemic, although it requires special attention to aspects of student reading ability and teacher creativity for optimal results. The COVID-19 pandemic encourages innovation in education through the use of interactive and adaptive digital technology, which is expected to be the foundation of future learning development.

In addition, Adzkiya & Suryaman's (2021) research entitled "The Use of Google Sites as a Media for English Learning for Grade V Elementary School during the COVID-19 Pandemic". This research uses a qualitative descriptive approach with a sample of 10 students who have personal smartphones. Data was collected through observations, interviews, and documentation of the use of Google Sites and supporting applications such as Google Drive, Google Forms, and WhatsApp. This research highlights the effectiveness of Google Sites as a simple, interesting and practical online learning media. Google Sites is able to present materials in various forms such as text, images, video and audio, as well as facilitating collaboration and free access. The developed learning website named "English Club DSA" helps to increase students' interest and comfort in learning English online. In addition, the use of this media is supported by other platforms to facilitate the learning and assessment process. The advantages of using Google Sites include easy access, attractive appearance, variety of media that support self-learning, and more efficient costs. Students feel more comfortable and interested in learning English through this medium. However, the main drawback is the dependence on a stable internet connection and the constraints of understanding technology among students and teachers. The use of Google Sites can improve students' reading skills through text-based materials that are presented in an interesting and interactive way. Materials equipped with

images, videos and audio also help students understand the context and improve overall reading comprehension. The results show that Google Sites is effective and preferred by students because it is practical, interesting, and able to increase interest and motivation to learn English. Students understand the material more easily and feel comfortable learning online. It is recommended that teachers and schools continue to develop Google Sites-based learning media by adding interactive features and more varied multimedia. It is also important to improve students' technological literacy and ensure adequate internet access so that the online learning process can run optimally. In addition, training on the use of technology for teachers and students needs to be improved to overcome the constraints of understanding technology.

On the other hand, research conducted by Doloksaribu & Manurung (2024) with the title "The Effect of Google Sites Media Use on News Text Reading Ability of Class VIII Students of SMP Negeri 37 Medan" used a quantitative experimental method with a one-group pretest-posttest design. This study shows that the use of Google Sites media significantly improves the ability to read news texts of class VIII students at SMP Negeri 37 Medan, as evidenced by the increase in pretest and posttest scores and supporting statistical analysis. The use of digital media is innovative and relevant to technological developments, and provides empirical evidence of improving students' reading skills. The drawback is that it only involves one group without a control group, so it is less able to control other variables that affect the results. The relationship with reading ability shows that Google Sites Media is effective in improving the ability to read news texts, including students' comprehension and reading speed. The results showed a significant increase from pretest to posttest scores, supporting the positive effect of Google Sites media on reading ability. The recommendation is that the use of digital media based on Google Sites is suggested as an effective learning media to improve students' reading skills, and needs further development and research with a more comprehensive design. This finding is consistent with the results of a meta-analysis conducted by Apfani & Tulljanah (2025) which showed that the use of web-based technology consistently has a positive impact on reading comprehension skills at various levels of education.

In conclusion from the various studies that have been described, it can be concluded that the use of digital learning media based on Google Site has great potential in improving the reading comprehension skills of elementary school students. This platform not only allows the presentation of varied and interactive materials, but also supports independent, collaborative learning, and increases students' learning motivation. The integration of multimodal content such as text, images, videos and interactive quizzes has been proven to strengthen student engagement and build deeper reading comprehension (Adzkiya & Suryaman, 2021; Bhagaskara et al., 2021). However, the success of its implementation is strongly influenced by the readiness of teachers, technological infrastructure, and students' digital literacy, so it requires continuous training support and teacher capacity building (Susanto & Ardiansyah, 2019). Therefore, the utilization of Google Site as a digital learning medium must be accompanied by active, innovative and reflective pedagogical strategies to truly address the challenge of low reading literacy at the primary school level and equip students with 21st century skills.

To further strengthen the findings, the reviewed articles were analyzed thematically based on the features of Google Site that support reading comprehension. These include the platform's capacity for multimodal content (text, images, audio, video), collaborative tools, and flexibility of access. Several studies (e.g., Adzkiya & Suryaman, 2021; Bhagaskara et al., 2021; Ekosantoso et al., 2025) emphasized that these features were particularly effective in increasing student motivation, engagement, and understanding during reading activities. Thematic synthesis also

identified that project-based learning, independent tasks, and group collaboration through Google Site were frequently applied strategies that supported students' reading comprehension. These strategies helped students engage in higher-order thinking, such as making inferences, summarizing, and reflecting (Amellya & Khasanah, 2021; Damanik, 2023).

Regarding methodology, of the 41 articles reviewed: 23 articles (56%) used qualitative descriptive methods;13 articles (32%) applied experimental or quasi-experimental designs; and 5 articles (12%) used mixed-method or survey approaches.

However, only a few studies (e.g., Doloksaribu & Manurung, 2024; Apfani & Tulljanah, 2025) rigorously measured students' reading comprehension outcomes using standardized instruments. This highlights a gap in methodological strength and the need for more empirical studies focusing on direct reading outcomes. A quality appraisal of the included studies was conducted using basic criteria such as clarity of research design, data collection techniques, relevance to elementary literacy, and presence of triangulation. Most studies were rated as moderate to high quality, although several lacked detailed explanation of validity checks or had limited sample sizes.

While Google Sites presents considerable benefits, several challenges were repeatedly noted. First, technological constraints including limited access to stable internet and devices posed barriers in less-resourced contexts (Sapriadi et al., 2025). Second, teacher readiness emerged as a critical issue. Many teachers lacked the technical skills or time to design engaging, multimodal materials on Google Sites (Lesasunanda & Malik, 2024). Another limitation is related to students' digital literacy. Especially in lower elementary grades, students often required additional assistance navigating the site or interpreting text instructions (Bhagaskara et al., 2021). Furthermore, monotony in media presentation and lack of interactivity could reduce student engagement if not designed creatively. In terms of research quality, although most articles were peer-reviewed and methodologically sound, several did not include clear data triangulation or control groups, which may limit the generalizability of their findings (Doloksaribu & Manurung, 2024). Therefore, future research should focus on improving research designs and include larger sample sizes, control groups, and longitudinal analysis.

Conclusion

This study concludes that Google Site-based digital learning media holds significant potential in enhancing elementary students' reading comprehension. Through the integration of multimodal, interactive, and accessible content, Google Sites can foster reading interest, support independent and collaborative learning, and increase overall student engagement. These conclusions are drawn from a Systematic Literature Review (SLR) of 41 peer-reviewed articles published between 2015 and 2025. The SLR method, structured using the PRISMA model, allowed for a rigorous and transparent synthesis of research findings across diverse contexts. The reviewed studies consistently reported positive outcomes, particularly in terms of student motivation, engagement, and access to materials. However, there was some variation in the reported effectiveness depending on factors such as student digital literacy levels, teacher preparedness, and infrastructure availability. The findings further indicate that the success of Google Site integration is strongly tied to active, reflective, and student-centered pedagogical strategies. To ensure effective implementation, future efforts should focus on developing teacher capacity through targeted training, providing practical design guidelines, and improving technological access in schools. These steps are essential for leveraging Google Site not only as a digital tool but as a transformative medium to meet the goals of the Merdeka Curriculum and broader 21st-century education standards.

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