

Development of Google Sites-Based Indonesian Language Learning Media to Improve Students' Literacy Skills at UPTD SMP Negeri 3 Parepare

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Article History	Abstract
Original Research Article	<p><i>This study investigates the development of Google Sites-based Indonesian language learning media to improve literacy skills among junior high school students. The research was conducted at UPTD SMP Negeri 3 Parepare using a Research and Development (R&D) approach with the ADDIE model consisting of Analysis, Design, Development, Implementation, and Evaluation. The study involved Grade VIII students, Indonesian language teachers, and expert validators. Data were collected through observation, interviews, questionnaires, validation sheets, and literacy tests. The results indicated that students and teachers required more interactive and technology-based learning resources. The developed Google Sites media was validated by experts and categorized as highly feasible. Practicality testing demonstrated positive responses from both teachers and students. Effectiveness testing revealed significant improvement in students' literacy achievement, as evidenced by higher post-test scores compared to pre-test scores and a moderate N-Gain category. The findings suggest that Google Sites provides an accessible, interactive, and student-centered learning environment that supports literacy development in Indonesian language learning. Keywords: Google Sites, literacy skills, Indonesian language learning, digital learning media, ADDIE model.</i></p> <p>Keywords: Google Sites, Literacy Skills, Indonesian Language Learning, Digital Learning Media, ADDIE Model, Interactive Learning, Student-Centered Learning, Literacy Development.</p>
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<p>Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.</p> <p>Citation: Nur Wahidah, Nuraeni Kasman, Jumiati, & Andi Sadapotto. (2026). <i>Development of Google Sites-based Indonesian language learning media to improve students' literacy skills at UPTD SMP Negeri 3 Parepare</i>. UKR Journal of Education and Literature (UKRJEL), 2(3), 118-123.</p>	

1. Introduction

According to Gee (2015), literacy is not merely the ability to read and write but also the capacity to participate effectively in social and digital practices. Similarly, Kern (2000) argues that literacy involves interpreting and creating meaning through various forms of communication.

As noted by Robin (2016), digital learning platforms support student engagement by integrating multimedia resources that enhance understanding and retention. Furthermore, Bates (2019) emphasizes that web-based learning environments promote flexibility, accessibility, and learner autonomy.

Literacy is widely recognized as a fundamental competence for academic achievement and lifelong learning. In the twenty-first century, literacy extends beyond reading and writing and encompasses the ability to access, evaluate, interpret, and communicate information across multiple

digital platforms. Educational institutions are therefore required to integrate digital technologies into teaching and learning processes to ensure that students acquire the competencies necessary to thrive in an increasingly information-rich society.

Indonesian language learning plays a strategic role in the development of students' literacy competencies. However, many classrooms still rely on conventional teaching methods characterized by teacher-centered instruction, textbook dependence, and limited use of digital resources. Such conditions often reduce student engagement and hinder the development of critical literacy skills.

Google Sites has emerged as a promising platform for educational innovation. It enables educators to integrate text, images, videos, hyperlinks, online assessments, and collaborative learning activities into a single learning

environment. Previous studies have reported that digital learning environments enhance student motivation, autonomy, and learning outcomes.

The present study aims to develop and evaluate Google Sites-based learning media for Indonesian language instruction. Specifically, the study seeks to identify learning needs, develop a valid and practical digital learning medium, and examine its effectiveness in improving students' literacy skills.

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2. Literature Review

Piaget (1972) stated that learners actively construct knowledge through interaction with their environment, while Bruner (1996) emphasized discovery learning as a foundation for meaningful knowledge construction.

Mayer (2021) explains through the Cognitive Theory of Multimedia Learning that students learn more effectively when information is presented through a combination of words, images, and interactive media.

Constructivist learning theory emphasizes that knowledge is actively constructed through interaction, collaboration, and authentic learning experiences. According to Vygotsky (1978), learners develop understanding through social interaction and scaffolding provided by teachers and peers. Digital learning environments align with constructivist principles by providing opportunities for exploration and collaborative knowledge construction.

Literacy in contemporary education includes reading comprehension, information literacy, digital literacy, and critical thinking. UNESCO highlights literacy as the ability to identify, understand, interpret, create, and communicate information in various contexts. Trilling and Fadel (2009) further emphasize the importance of literacy for fostering critical thinking, communication, collaboration, and creativity.

Digital learning media have become increasingly important due to technological advancement. Digital platforms support flexible learning, facilitate access to diverse resources, and promote student-centered instruction. Research has consistently shown that multimedia resources improve comprehension and learner engagement.

Google Sites is a web-based platform that allows educators to create instructional websites without advanced programming knowledge. Its integration with Google Workspace applications facilitates the delivery of multimedia content, online assessments, and collaborative learning experiences. Previous studies have reported positive effects of Google Sites on student motivation, engagement, and academic performance.

Based on the literature, the integration of Google Sites into Indonesian language instruction is expected to improve literacy outcomes by creating interactive, accessible, and engaging learning experiences.

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3. Method

This study employed a Research and Development design using the ADDIE model. The five stages included Analysis, Design, Development, Implementation, and Evaluation.

During the analysis stage, observations, interviews, and questionnaires were conducted to identify the needs of teachers and students. The design stage focused on preparing instructional objectives, content structures, navigation systems, and multimedia components. The development stage involved creating the Google Sites platform and validating it through expert review.

Implementation was conducted with Grade VIII students at UPTD SMP Negeri 3 Parepare. Students participated in learning activities using the developed platform. Evaluation consisted of formative and summative assessments. Data were collected through validation sheets, practicality questionnaires, observations, and literacy tests.

Quantitative data were analyzed using descriptive statistics, paired-sample t-tests, and N-Gain calculations. Qualitative data from interviews and observations were analyzed through data reduction, data display, and conclusion drawing.

4. Results

The needs analysis revealed that students perceived conventional Indonesian language instruction as less engaging. Most students expressed a strong preference for digital learning resources incorporating videos, images, interactive quizzes, and online discussions. Teachers also indicated the need for practical and accessible digital media.

The developed Google Sites platform included several features: a homepage, learning objectives, instructional materials, multimedia resources, interactive exercises, discussion forums, digital libraries, and reflection activities. The design emphasized ease of navigation and visual attractiveness.

Expert validation results indicated that the media met the criteria for content accuracy, instructional design quality, usability, and visual presentation. Reviewers recommended minor revisions related to navigation and content organization, which were subsequently implemented.

Practicality testing showed positive responses from teachers and students. Teachers reported that the platform facilitated lesson delivery and supported independent learning. Students found the platform engaging and easy to use.

Effectiveness testing demonstrated significant improvement in literacy achievement. Students' post-test scores were substantially higher than their pre-test scores. Statistical analysis confirmed significant differences between pre-test and post-test results. N-Gain analysis indicated moderate improvement, suggesting that the intervention contributed meaningfully to literacy development.

5. Discussion

The findings support previous research emphasizing the value of digital learning environments in enhancing literacy development. The positive responses from students indicate that multimedia-rich learning experiences increase engagement and motivation. The integration of videos, texts, and interactive assessments accommodated diverse learning preferences and promoted active participation.

The study also confirms the relevance of constructivist learning principles. Through Google Sites, students were able to access resources independently, collaborate with peers, and engage in reflective learning. Such activities support deeper comprehension and critical literacy development.

The significant improvement in literacy outcomes demonstrates that technology integration can address challenges associated with conventional instruction. The accessibility of Google Sites allows learning to continue beyond classroom boundaries, promoting self-directed learning and continuous literacy practice.

From a pedagogical perspective, the study highlights the importance of aligning technological tools with instructional objectives. Effective digital learning media should not merely digitize traditional content but should

create opportunities for interaction, exploration, and authentic learning experiences.

The results also suggest implications for educational policy and teacher professional development. Schools should provide support for technology integration, while teachers should receive training in the design and implementation of digital learning resources.

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6. Conclusion

The study successfully developed Google Sites-based Indonesian language learning media that were validated as feasible, practical, and effective. The findings indicate that the platform supports literacy development by providing interactive and accessible learning experiences. Students demonstrated improved literacy achievement following implementation of the media.

The study recommends broader adoption of Google Sites and similar digital platforms in language education. Future research may investigate long-term effects, larger sample sizes, and integration with other literacy-related competencies. The development of innovative digital learning media remains essential for preparing students to meet the demands of twenty-first-century education.

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