Literature Review: Development of Google Sites – Based Multimedia to Improve Elementary School Students’ Reading Literacy

Titik Mulyaningsih1*, Hendratno1, Heru Subrata1
1* Universitas Negeri Surabaya, Surabaya, Indonesia

ABSTRACT

Objective: This study aims to determine the advantages and disadvantages of multimedia learning on Google Sites, content design, and effectiveness in improving reading literacy. Method: This research method is a review of literature from Scopus journals and Google Scholar in 2017 – 2023. The data analysis used in this study was qualitative descriptive. Results: The result of this study is that Google Sites has advantages in terms of ease of access and ease of use. Interesting content design can increase students’ interest in reading. The limitation of Google Sites multimedia is the internet connection. Novelty: The novelty of this research is a review of the literature used from Google Scholar and Scopus so that the results can provide information on the success rate of developing Google Site-based multimedia in improving reading literacy. This makes the research relevant and has the potential to significantly contribute to the literature on reading literacy and the use of technology, particularly Google Sites in Basic Education.

INTRODUCTION

One of life’s most important language skills is the ability to read, especially in education. With good reading skills, one can acquire new information and improve their knowledge, although information can be obtained through various sources (D. Wulandari & Hendratno, 2021). According to Tarigan (2008) in (Astomo, 2023) in the text. According to Roomy (2022) in (Marliana & Subrata, 2023) Elementary school students with good reading skills are essential for higher-order thinking, including good reading comprehension. Students with good reading skills can become more critical and knowledgeable readers, better understand and evaluate the information they obtain, and gain deeper and broader knowledge. Reading comprehension is a series of processes carried out carefully and meticulously to read the entire content of the reading and relate the content of the reading to the knowledge that has been previously possessed (Intaniasari & Utami, 2022).

A study conducted in 2018 by the Program for International Student Assessment (PISA) showed that students in Indonesia have low reading skills. Of the 79 countries surveyed, Indonesia ranked 74th, comparable to other Southeast Asian countries (Hewi & Shaleh, 2020). Following the mandate of Indonesian education, literacy is critical. The current focus of education, especially at the primary education level, is to improve literacy. The meaning of literacy is complex and fickle, and many different definitions and interpretations have been given (Hermawan et al., 2020). According to Andriyani et al (2018) in (Harliana, 2023) Literacy ability is a skill that becomes the basic foundation for mastering science.

Building a culture of reading literacy takes awareness and enthusiasm to change something. Reading literacy is not just an ordinary reading activity but also an activity...
that can potentially build culture. Reading literacy culture has two advantages: fostering an interest in reading and creating reading activities (Lubis, 2020). Today's technology is very advanced in learning media, making learning easier and not boring for students. According to Raihany et al. (2022) in (Ramadia et al., 2023), using technology makes learning more active and enjoyable (Handayani et al., 2022). Developing digital-based media is still difficult to use because teachers ignore the importance of using learning, and media preparation using creative learning tools is difficult to create and produce.

According to Ane (2015) in (Wulanjani & Anggraeni, 2019), the rapid increase in information and technology has resulted in a decline in interest in reading in the country. Students now watch TV more often or are in front of the screen of electronic devices. According to Pradana in (Rohim & Rahmawati, 2020) the low interest in reading is caused by several things, including the high price of books and limited library facilities. Not only the rapid progress in communication and information technology in the 21st century, marked by the ease of internet access and creative learning websites.

Based on articles written by Ferismayanti (2012) in (Pratomo et al., 2022) provides an explanation of Google Sites as one of the web resources that can be used during the learning process. This media is more accessible to teachers, especially students, to increase their love of reading outside of subject hours. Google-based websites make it easier for students to learn teaching materials and update learning data on certain subject websites, especially Indonesian. This makes it easier for students to read what they need to gain insight and study at home. Google Sites is one platform that teachers can use to create interactive and accessible learning content for students. One of the services or features offered by Google is the ability to create websites for free, which allows teachers and students to collaborate in creating effective learning media content (Wardhani & Zaini, 2023).

Modern learning must be innovative, interactive, and able to improve students' fundamental competencies. Some characteristics of the independent curriculum that must be considered are the concept of learning at the right level, the consequences of differentiated learning (students learn according to their style and abilities), integrated materials, competencies, and activities to increase students' creativity, critical thinking, and creative abilities. (Fanani et al., 2022) For this reason, learning media is needed that can attract attention and foster students' interest in reading.

Google sites can be used as a complex learning medium, including audio, visual, video, reading text, and questions related to learning materials. Multimedia is a combination of content forms of text, sound, images, animation, video, and interactive (Sugiyani et al., 2014). In other words, multimedia consists of using computers to display and combine images, animations, text, sound, and video, along with tools and connections that allow people to create, interact, and communicate with each other. All these websites are linked to each other through links to Google websites. Therefore, researchers are interested in developing and producing multimedia products that rely on Google's website. According to research (Ramadhan Anggit Sastrawan (2021) in (Nuryati et al., 2022) the use of web-based learning media produces better results for students.
Researchers are interested in conducting a literature review research on the development of multimedia based on Google Sites with the hope that students can choose between reading or watching to learn because the way students learn and understand is different. One of the Google products used to create websites is Google Sites (Sulistyawati et al., 2022) Google Sites is easy for beginners to create and manage so that anyone can use or create it, especially teachers. This makes it easier for students to read what they need to gain insight and study at home. Google Sites is one platform that can be used to create learning content that is interactive and easily accessible to students. Therefore, understanding how Google Sites is expected to be used effectively in improving the reading literacy of grade V elementary school students will make an important contribution to efforts to improve the quality of Basic Education.

The novelty of this research is a review of the literature used from Google Scholar and Scopus so that the results can provide information on the success rate of developing Google Site-based multimedia in improving reading literacy. This research literature review highlights the focus on reading literacy, using Google Sites, student-age classes, integrated approaches, and impact evaluation. Research questions from this study are: 1) What are the advantages and disadvantages of Google-based multimedia learning Sites?; 2) How can the content design and interactivity in Google Sites influence students' interest and motivation to read?; 3) How effective are Google Sites multimedia in improving reading literacy? This makes the research relevant and has the potential to significantly contribute to the literature on reading literacy and the use of technology, particularly Google Sites in Basic Education.

RESEARCH METHOD
The form of research used in this research is library research. Literature can be obtained by applying several ways, such as reading, understanding, studying, criticizing, or reviewing literature obtained from certain sources. Literature review means finding and reading many books, journals, and other publications related to the topic to write about something (Abraham & Supriyati, 2022). Scopus and Google Scholar are the sources of this data. by searching for articles through Harzing publish or perish with Google sites-based literacy keywords in the period 2017 - 2023. In the search for these articles, as many as 984 articles came from Google Scholar, then selected 50 articles were following the topic. In contrast, as many as 934 articles did not following the research topic. Of the 50 articles selected, 8 articles were selected that were closest to the research topic. While searching articles through Harzing Publish or Perish from Scopus with the keyword google sites reading literacy found as many as 43 articles, After being selected, I approached the topic as many as 6 articles, from the 6 articles selected the closest to the topic, found as many as 2 articles. So in this study found 8 articles from google scholar and 2 articles from scopus, so that there were 10 eligible articles related to google sites-based literacy, then analyzed the data descriptively and qualitatively. Qualitative research, which usually uses an inductive approach and is descriptive, makes the process and meaning generated from the subject's
perspective more focused in this qualitative research (Adlini et al., 2022). Here is the flowchart in this research literature review:

![Flowchart](https://ijoerar.net/index.php/ijoerar)

**Figure 1. Literature Review Flow**


According to Miles & Huberman in (Fadli, 2021), There are three types of activities in data analysis: data reduction, data display, and conclusions. According to Whitney (1960) in (Rusandi & Rusli, 2021) The descriptive method is fact-finding with proper interpretation. Qualitative data analysis involves four stages, namely: 1) Data collection is collecting data in the field (both from journal studies and tests) to obtain the necessary data for research purposes; 2) Data reduction involves summarizing, selecting important

https://ijoerar.net/index.php/ijoerar
Literature Review: Development of Google Sites – Based Multimedia to Improve Elementary School Students’ Reading Literacy

elements, and focusing on important elements to create a clear picture of the data collected and to make it easier for researchers to access more data; 3) The type of data presentation most often used in qualitative research is narrative text, which consists of concise descriptions, charts, and relationships between individuals; 4) New discoveries require verification and conclusion.

RESULTS AND DISCUSSION

Results

Google Sites is one form of Google product that can be used to create websites. Google Sites was chosen because of several advantages, such as: 1) easy to use and free of charge; 2) easily accessible anytime and anywhere via the internet, regardless of the device used, such as a mobile phone or PC; 3) the display can be customized according to the type of device used; and 4) the ability to combine a wide variety of information from multiple sources (Bhagaskara et al., 2021).

Google Sites allows students to access learning materials online, so they can learn anytime and anywhere with an internet connection. Google Sites allows the use of multimedia elements such as images, video, and audio to make learning materials more engaging and interactive, which can increase student interest in learning. Google Sites can share important information, such as announcements or schedules, with students and parents, improving communication between schools and families. The following are the results of a literature review obtained from a search on Harzing publish or perish, then selected 10 articles under the research topic.

<table>
<thead>
<tr>
<th>No</th>
<th>Quotation</th>
<th>Writer</th>
<th>Heading</th>
<th>Year</th>
<th>Literature review results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
<td>N Munawarah</td>
<td>Development of problem-based learning based LKPD through interactive videos assisted by Google Site to stimulate critical thinking skills</td>
<td>2022</td>
<td>Other research from with the results of teaching materials based on PBL-based google sites. In addition, teaching materials are developed with the help of google sites website</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>Samsuri Untung Wahyudi</td>
<td>Development of Google Sites learning media to increase student motivation in learning Indonesian</td>
<td>2023</td>
<td>The results showed that students' motivation towards the development of Google Sites media on average increased from 61.24% to 78%</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>A Prayudi, AA Anggriani</td>
<td>Development of Web-Based Interactive Learning Media Using Google Sites to Improve</td>
<td>2022</td>
<td>Video-based interactive learning media to improve student achievement created using Google sites is suitable for use in learning.</td>
</tr>
</tbody>
</table>

https://ijoerar.net/index.php/ijoerar 000045 - 5
## Literature Review: Development of Google Sites – Based Multimedia to Improve Elementary School Students’ Reading Literacy

<table>
<thead>
<tr>
<th>No</th>
<th>Quotation</th>
<th>Writer</th>
<th>Heading</th>
<th>Year</th>
<th>Literature review results</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>W Pratomo, N Nadziroh…</td>
<td>Student Achievement Development Of Google Sites Application As A Strengthening Of Thematic Learning Literacy Of Grade Iv Students Of Sdn 3 Karanganyar</td>
<td>2022</td>
<td>Website-based information with the Google Sites application as a reinforcement of learning literacy, a website-based information system with the Google Sites application as …</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>DE Muliani, N Kasmira, Y Yusmanila</td>
<td>Validation and Practicality of Google Sites Based Teaching Materials</td>
<td>2023</td>
<td>The results showed that teaching materials based on google sites are very valid</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Arindra Evandian Bhagaskara*, Aulia Kaffah Firdausi, Mochammad Syaifuddin Rosiyana</td>
<td>Application of Google Sites Based Webquest Media in Learning</td>
<td>2021</td>
<td>The advantage of googe sites-based webquest media is that it is able to increase interest in learning and develop students’ scientific attitudes.the weakness lies in the difference in teacher creativity in making media.</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Rosiyana</td>
<td>Utilization of Google Sites Learning Media in Distance Indonesian Learning</td>
<td>2021</td>
<td>Learning using google sites provides benefits for students and teachers that make students more interested and fun, students learn anywhere, can uploud assignments, add videos from youtube directly</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>Fadillah Salsabila, Aslam</td>
<td>Development of Google Sites Web-Based Learning Media in Elementary Science Learning</td>
<td>2022</td>
<td>Web-based learning media developed by Google Sites is particularly beneficial for teachers and students.</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>Stevi Wulandari &amp; Ni’matuz Zuhroh</td>
<td>Development of interactive learning media based on Google Sites websites in improving learning outcomes</td>
<td>2023</td>
<td>The results obtained in the experimental class 77.8 rose to 82.7. For the validation assessment of media experts get a score of 94%, material experts 78%, teachers 78%, student responses 80-100%</td>
</tr>
</tbody>
</table>

[https://ijoerar.net/index.php/ijoerar](https://ijoerar.net/index.php/ijoerar)
Discussion

Google Sites multimedia makes students play a leading role in learning, from the start of each group discussing each other and students becoming more active in asking questions. The role of the teacher in the learning process is as a facilitator and director in learning activities (Ramadia et al., 2023). The advantages of this Google site are that it is easy to create for free and can be searched through Google. Students can quickly get information, save various files, and include links like Google Forms, PhET simulations, YouTube, and more (A. W. Wulandari et al., 2022). According to Akca & Kavak (2021) in (Ozturk & Ozturk, 2022), young people have many online opportunities through digital media, such as access to information, education, art, and creativity, relationships with friends, identity expression, entertainment, and creative expression, and engagement Google Sites is very useful for learning because it provides information quickly and can be accessed at any time (Wahyudi et al., 2023).

Google Sites app products help students better understand thematic learning. The app gets the highest percentage of marks on each assessment. The percentage of material expert scores is 93% with Very Good criteria, the percentage of media expert scores is 76.7% with good criteria, and the percentage of teacher satisfaction scores is 80% with Very Good criteria (Pratomo et al., 2022). The Google Sites web-based teaching materials can likely display images, sounds, and videos that illustrate Indonesia's natural wealth and the various activities carried out to use it. This allows students to stay at home and not have to visit far to see the natural resources that are or are not present in the area where they live (Sugiyani et al., 2014). Using Google Sites is also beneficial, as it allows teachers to make online classes accessible to students whenever and wherever they want (Oktalia & Drajati, 2018).

According to (Rahmawati, 2019) in (A. W. Wulandari et al., 2022) the use of interactive multimedia (MMI) as a learning support can improve student learning outcomes. Web-based learning media that uses Google Sites as a tool to provide learning materials, especially Indonesian. This application is easy to use and has a free 100 MB capacity, so it is suitable to be used as a learning medium (Wahyudi et al., 2023). In addition, based on Gromova (2017) in (Morozova et al., 2020) there are design engagement issues relating to distance learning models and electronic textbooks. The routine use of information technology in foreign language education requires various software systems (Morozova et al., 2020).

Education has largely been digitized. In this fast-paced world, keeping up with the latest developments has become mandatory for professional education (Saxena et al., 2018). Applying digital technology in education can provide more flexible and interactive
learning. Students more actively interact with peers and teachers because they are exposed to various online teaching materials, including online notes and videos (Ramasundrum & Sathasivam, 2022). This program is intended so that students in Indonesia are always free to access learning anywhere, anytime, and from any source. So, it is not surprising that from the pandemic era, many new applications have sprung up to help people around the world meet the needs of their profession during the pandemic (Zaki & Islam, 2022).

The content contained in Google Sites is very attractive to students consisting of several views on the homepage adapted to the concept map or chart that has been created, the format of sketches, flowcharts, and storyboards, the content of materials, images, videos, practice questions, LKPD, and daily tests are included in the media field (Hasna et al., 2021). This feature model is also ideal for the tasks teachers give students, as in the following image from the study entitled Development of Google Sites learning media to increase student motivation in learning Indonesian. Google Sites, a component of Google G Suite, is a free, collaborative, web-based online application. In their assignment website design, they should include blogs, informative text, and YouTube videos explaining language teaching-related topics (West & Malatji, 2021). The following is a display of content and examples of problems in the Google Sites homepage.

![Image of Google Sites homepage](https://ijoerar.net/index.php/ijoerar)

**Figure 2.** Google Sites display
Source: (Wahyudi et al., 2023)

In the picture above is the display of google sites containing teaching materials in the form of text, videos and images. Google Sites also contains questions or LKPD or Quiz as in the following picture:
In addition to the features mentioned above, there is the Sharing and Permissions Settings feature, which teachers make into a page for students to rate their learning. Administrators using this feature can choose whether to make the e-learning site open to the public so that everyone can access it without having to register or make it closed to everyone so that only explicitly allowed people can access it, require a registration process, or a combination of public and private. So that current students can find out the results of the evaluation. A website is a collection of pages within a domain containing content that internet users can read and view through search engines. In most cases, the content that can be read and viewed within a website consists of images, illustrations, videos, and text content for various purposes. The internet medium chosen is the Google website, which the teacher can fill or change with interesting learning content (Nuryati et al., 2022). Google Sites-based modelling emphasizes two important elements in the educational process: ability and learning (Murniati, 2022).

In research that has been carried out by (Hasna et al., 2021) found that the use of LKPD assisted by Google Sites can make students think critically and is very suitable if learning is carried out with the PBL model in today's era students must master 21st-century skills, namely 4C. In addition, a written article (Wahyudi et al., 2023) explained that it was found that there was an increase in student scores after using Google Sites media because students were motivated to read and enjoyed learning with the help of Google Sites media. In the Merdeka curriculum, we must make classroom learning fun and student-centered. We must take advantage of technological advances, including using Google Sites-based websites.

Through Google Sites, students are free to explore new material, and knowledge can be accessed anywhere. Moreover, almost all students have their own mobile phones, for it is very effective if students have free time while studying. The design of Google Sites is made very attractive in agreement with the research articles written (Bhagaskara et al., 2021). Teaching materials that are made very valid by media experts, material experts, and teacher and student responses show that the design on Google Sites is very diverse.
in one link can include many things such as teaching materials in the form of text, images, YouTube videos and equipped with various types of interesting questions such as Quizzes and Google Forms. So, Google Sites is very effective and efficient for multimedia learning.

CONCLUSION

**Fundamental Findings:** Based on a review of several articles, researchers concluded that Google Sites-Based Multimedia Learning makes students learn easily and flexibly anytime and anywhere. Engaging content design and the interactivity of Google Sites can influence students' interest and motivation to read, increasing reading literacy scores. In comparison, the drawback is that it requires a stable Internet Connection. 

**Implications:** Based on these conclusions, it is recommended that teachers, especially elementary schools, develop multimedia based on google sites in teaching and learning activities.

**Limitation:** The limitation of Google Sites multimedia is the internet connection. 

**Future Research:** further references to the article are suggested, focusing on evaluating the impact of using Google Sites in multimedia development and technology-based teaching methods will be an important step in understanding the full potential of this platform.

ACKNOWLEDGEMENTS

The author would like to thank the supervisors who have provided valuable suggestions and input to complete this article.

REFERENCES


Literature Review: Development of Google Sites – Based Multimedia to Improve Elementary School Students’ Reading Literacy

https://doi.org/10.37680/absorbent_mind.v3i1.2665


Literature Review: Development of Google Sites – Based Multimedia to Improve Elementary School Students’ Reading Literacy

Al-Ubudiyah: Jurnal Pendidikan Dan Studi Islam, 2(1), 48–60. https://doi.org/10.55623/au.v2i1.18


*Titik Mulyaningsih (Corresponding Author)
Universitas Negeri Surabaya
Address: Jl.Lidah Wetan, Lidah Wetan, Kec.Lakarsantri, Surabaya, Jawa Timur
Email: titik.22036@mhs.unesa.ac.id

Hendratno
Universitas Negeri Surabaya
Address: Jl.Lidah Wetan, Lidah Wetan, Kec.Lakarsantri, Surabaya, Jawa Timur
Email:hendratno@unesa.ac.id

Heru Subrata
Universitas Negeri Surabaya
Address: Jl.Lidah Wetan, Lidah Wetan, Kec.Lakarsantri, Surabaya, Jawa Timur
Email: herusubrata@unesa.ac.id