

## **PENGARUH PENGGUNAAN MEDIA PEMBELAJARAN GOOGLE SITE TERHADAP MINAT BELAJAR SISWA PADA MATA PELAJARAN INFORMATIKA**

Gracelin Mbuik<sup>1</sup>, Maria M. B. Sogen<sup>2</sup>, Jhon Enstein<sup>3</sup>

<sup>1</sup>Program Studi Pendidikan Informatika, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Citra Bangsa, Kupang, Indonesia

*Corresponding Author: gracelinmbuik@gmail.com*

Received November 2025 • Revised November 2025 • Accepted November 2025

### **ABSTRACT**

This study investigates the effect of integrating Google Site as an instructional medium on students' learning interest in the Informatics subject at SMP Kristen Citra Bangsa Kupang. Using a quantitative experimental design with pre-test and post-test measures in control and experimental groups, data were collected through validated questionnaires and structured classroom observations. The results reveal a statistically significant enhancement in students' learning interest following the implementation of Google Site, reflected in the increased post-test mean score (86.5) compared to the pre-test (72.3). These findings demonstrate that Google Site serves as an effective digital platform that fosters active participation, motivation, and engagement, ultimately creating a more interactive and student-centered learning environment.

**Keywords:** *learning media, Google Site, learning interest, informatics education*

### **ABSTRAK**

Penelitian ini mengkaji pengaruh penggunaan Google Site sebagai media pembelajaran terhadap minat belajar siswa pada mata pelajaran Informatika di SMP Kristen Citra Bangsa Kupang. Dengan menggunakan desain eksperimen kuantitatif melalui pengukuran pre-test dan post-test pada kelompok kontrol dan kelompok eksperimen, data dikumpulkan melalui kuesioner yang telah divalidasi serta observasi kelas terstruktur. Hasil penelitian menunjukkan adanya peningkatan yang signifikan secara statistik terhadap minat belajar siswa setelah penerapan Google Site, yang terlihat dari peningkatan nilai rata-rata post-test (86,5) dibandingkan dengan pre-test (72,3). Temuan ini menunjukkan bahwa Google Site merupakan platform digital yang efektif dalam mendorong partisipasi aktif, motivasi, dan keterlibatan siswa, sehingga menciptakan lingkungan pembelajaran yang lebih interaktif dan berpusat pada peserta didik.

Kata kunci: media pembelajaran, Google Site, minat belajar, pendidikan informatika.

### **A. INTRODUCTION**

The rapid advancement of information and communication technology (ICT) has transformed the landscape of education, requiring teachers to adapt their instructional strategies to the digital era. The integration of ICT in learning is not merely an option but a pedagogical necessity to enhance students' engagement, motivation, and autonomy in the learning process. Internet-based learning media have enabled learners to access diverse learning resources anytime and

anywhere, supporting independent and interactive learning experiences. However, in many educational settings, particularly at SMP Kristen Citra Bangsa Kupang, traditional teacher-centered methods still dominate classroom practices. Such approaches often result in low student participation, limited creativity, and a decline in learning interest, especially in Informatics subjects that ideally require active exploration and technological engagement.

Several studies have emphasized the role of technology integration in improving learning quality. According to Lestari and Safitri [2023], the use of digital media enhances classroom interactivity by enabling dynamic communication between teachers and students. Similarly, Wahyu [2022] and Umbara [2022] found that web-based learning environments, such as *Google Site*, allow educators to organize materials systematically through text, images, videos, and hyperlinks, making the learning process more engaging and accessible. Nevertheless, the potential of *Google Site* remains underutilized in Indonesian secondary schools, particularly in facilitating student motivation and learning interest in ICT-related subjects. This gap highlights the need for empirical evidence on its effectiveness in formal educational contexts.

Learning interest plays a crucial role in determining students' academic success and persistence. Students with higher levels of interest tend to exhibit stronger attention, curiosity, and active participation in classroom activities. Conversely, monotonous learning environments tend to decrease their motivation and hinder cognitive engagement. Rambe et al. [2022] asserted that creative learning media can transform passive learning behaviors into active engagement by stimulating curiosity and enjoyment in learning. Therefore, integrating digital media such as *Google Site* may serve as a strategic solution to overcome low learning interest among students in Informatics.

The present research seeks to examine the impact of using *Google Site* as a digital learning medium on students' learning interest in Informatics at SMP Kristen Citra

Bangsa Kupang. Unlike previous studies that primarily focused on cognitive learning outcomes, this study emphasizes the affective aspect students' interest and motivation as critical indicators of engagement in digital learning environments. The study contributes new empirical insights into how a web-based platform can be integrated effectively into classroom practice to foster enthusiasm, interaction, and autonomy in learning. The innovation of this research lies in its contextual application of *Google Site* to middle school Informatics education, providing a practical model for enhancing learning engagement in the digital age.

## **B. MATERIAL AND METHODS**

### **2.1. Methods**

This study employed a **quantitative experimental design** using a pre-test and post-test control group structure to analyze the effect of using *Google Site* as a learning medium on students' learning interest in Informatics. The research was conducted at SMP Kristen Citra Bangsa Kupang during the 2024/2025 academic year. The population consisted of Grade IX students, and the sample was selected through **purposive sampling**, involving one experimental group and one control group with a total of 40 participants. The experimental group received instruction using *Google Site*, while the control group followed conventional face-to-face teaching methods.

The quantitative approach was chosen to obtain measurable data regarding changes in students' learning interest before and after the implementation of the media. The design aimed to compare mean

scores between groups to determine the statistical significance of differences resulting from the intervention. This approach aligns with Creswell's (2018) experimental design principles, emphasizing the relationship between treatment variables and behavioral changes in learning outcomes [2025].

## **2.2. Instrument**

The main data collection instrument was a learning interest questionnaire developed based on theoretical indicators proposed by Slameto [6] and Dalyono [7], which include attention, participation, curiosity, and enthusiasm in learning. The questionnaire used a Likert scale with five response categories ranging from "strongly disagree" (1) to "strongly agree" (5). In addition, an observation checklist was used to record students' behavioral engagement during classroom activities. The validity of the instrument was tested through expert judgment, while reliability was measured using Cronbach's Alpha, resulting in a coefficient of 0.87, indicating high internal consistency.

## **2.3. Procedures**

The research procedures consisted of three primary stages: preparation, implementation, and evaluation. During the preparation stage, the researcher designed digital learning materials through *Google Site*, including text, instructional videos, images, and links to interactive quizzes. The implementation stage was carried out over four weeks. The experimental group accessed all materials through the *Google Site* platform, while the control group learned through conventional teaching methods.

Students in both groups completed a pre-test before treatment and a post-test afterward. During implementation, teachers provided minimal verbal explanation to ensure that students relied primarily on the provided online materials. The final stage involved post-test administration and student feedback collection to assess perceptions of *Google Site* as a learning medium.

## **2.4. Data Analysis**

Data were analyzed using descriptive and inferential statistics. Descriptive analysis was conducted to determine the mean, standard deviation, and percentage distribution of learning interest scores. Inferential statistics were used to test the research hypothesis through simple linear regression to determine the effect of *Google Site* on learning interest. The significance level was set at 0.05. Statistical calculations were performed using SPSS version 25. Results from the analysis were interpreted to determine whether the implementation of *Google Site* significantly improved students' interest and engagement compared to traditional learning methods.

# **C. RESULTS AND DISCUSSION**

## **3.1. Results**

The data analysis focused on the differences in students' learning interest before and after the implementation of *Google Site* in the experimental class compared to the control class. The descriptive results indicated that students in the control class, who learned through conventional methods, achieved a mean pre-test score of 71.8 and a post-test score of 73.2, showing minimal improvement. In contrast, the experimental class, which utilized *Google Site*, demonstrated a

significant increase from 72.3 (pre-test) to 86.5 (post-test).

The results of the normality and linearity tests confirmed that the data were normally distributed and met the assumptions for parametric analysis. Subsequently, a simple linear regression test was conducted to examine the influence of *Google Site* usage on students' learning interest. The analysis produced a significance value of  $p = 0.000 < 0.05$ , indicating that the use of *Google Site* had a statistically significant positive effect on students' learning interest. The regression coefficient ( $\beta = 0.65$ ) suggested a moderate to strong relationship between the use of *Google Site* and the increase in student motivation and engagement.

**Table 1. Comparison of Mean Scores Between Control and Experimental Groups**

Group	Pre-test Mean	Post-test Mean	Mean Difference	Significance (p)
Control	71.8	73.2	+1.4	0.317
Experimental	72.3	86.5	+14.2	0.000

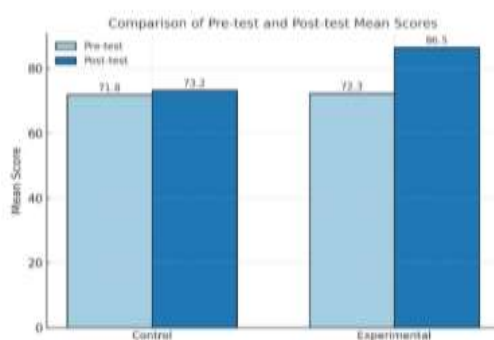


Figure 1. Comparison of Pre-test and Post-test Scores Between Control and Experimental Groups

The results from classroom observations supported the statistical findings. Students in the experimental class exhibited higher enthusiasm, participation, and attention during learning sessions. They interacted more actively with digital content and

demonstrated curiosity in exploring additional resources embedded in the *Google Site*. In contrast, students in the control class tended to rely on teacher explanation and showed lower participation in discussions.

### 3.2. Discussion

The findings of this study demonstrate that the integration of *Google Site* as a digital learning medium significantly enhances students' learning interest in Informatics. This result aligns with the constructivist learning theory, which emphasizes the importance of interactive and student-centered learning environments in fostering intrinsic motivation [8]. When learners are actively engaged in constructing knowledge through exploration, their interest and sense of ownership in learning increase substantially.

The increase in post-test scores in the experimental class indicates that *Google Site* facilitates more meaningful learning experiences by combining textual, visual, and interactive elements. The flexibility to access materials independently promotes self-regulated learning, which has been identified by Pintrich [9] as a key factor influencing students' motivation and persistence. Furthermore, the platform's integration of multimedia elements enhances cognitive engagement, making abstract Informatics concepts more concrete and comprehensible.

These results are consistent with previous studies by Wahyu [2] and Umbara [3], who found that digital-based media can transform conventional learning into more dynamic, participatory experiences. Moreover, the present study provides new empirical evidence by applying *Google Site* in a secondary school context, where digital learning is often

limited. The use of *Google Site* proved not only effective in presenting instructional content but also in encouraging students to take initiative, collaborate, and enjoy the learning process.

In a broader pedagogical perspective, these findings reaffirm the critical role of technology integration in improving affective learning outcomes such as interest, motivation, and engagement. The success of *Google Site* implementation in this study suggests that schools should consider institutional support for teachers in developing web-based instructional materials. Training programs and infrastructure development are essential to ensure the sustainability of digital pedagogical practices.

Overall, the results confirm that when appropriately designed and implemented, *Google Site* can serve as an effective and practical tool to transform passive learning environments into interactive, student-centered learning ecosystems.

## **E. CONCLUSION**

The results of this study provide empirical evidence that the integration of *Google Site* as a web-based learning medium exerts a statistically significant and pedagogically meaningful effect on students' learning interest in the Informatics subject at SMP Kristen Citra Bangsa Kupang. The implementation of *Google Site* effectively transformed a traditionally teacher-centered classroom into a dynamic, student-centered learning environment characterized by active participation, increased curiosity, and sustained enthusiasm for learning.

The statistical findings revealed a substantial improvement in the

mean post-test scores of the experimental group compared to the control group, confirming that *Google Site* promotes higher levels of affective engagement and learning motivation. This outcome substantiates the theoretical proposition that interactive digital environments enhance learners' intrinsic motivation by enabling autonomy, competence, and relatedness within the learning process. Accordingly, *Google Site* can be considered a viable digital pedagogy tool that bridges the gap between technological innovation and affective learning outcomes.

The novelty of this research lies in demonstrating the pedagogical efficacy of *Google Site* in junior secondary education, where empirical studies on digital learning media remain limited. By applying a structured experimental approach, this study contributes to the body of literature on ICT-based learning and provides a replicable model for integrating simple yet powerful web-based platforms into formal education.

From a practical standpoint, the study underscores the importance of digital literacy and instructional design competence among teachers to optimize the use of *Google Site* and similar technologies. Schools and educational institutions are encouraged to facilitate continuous professional development in digital pedagogy to sustain the positive impact of such innovations. Future research should explore longitudinal designs to assess the durability of learning interest over time and expand the investigation to other cognitive and socio-emotional learning outcomes such as problem-solving, creativity, and digital collaboration.

## **ACKNOWLEDGMENT**

The author would like to express sincere gratitude to the Faculty of Teacher Training and Education, Universitas Citra Bangsa, for the continuous academic support during this research. Deep appreciation is also extended to the principal, teachers, and students of SMP Kristen Citra Bangsa Kupang, who generously participated in this study and provided valuable feedback throughout the implementation process.

Special thanks are conveyed to Dr. Maria M. B. Sogen and Mr. Jhon Einstein for their guidance, insightful suggestions, and constructive criticism that greatly improved the quality of this research and publication.

## **DAFTAR PUSTAKA**

- Akhmad, L., & Safitri, D. (2023). Blended learning and digital innovation in education. *Jurnal Teknologi Pendidikan*, 15(2), 45–56.
- Bruner, J. (2009). *Toward a theory of instruction*. Cambridge, MA: Harvard University Press.
- Creswell, J. W. (2018). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). New York: Pearson Education.
- Dalyono, M. (2012). *Psikologi pendidikan*. Jakarta: Rineka Cipta.
- Fallo, D. Y. A., Sogen, M. B., & Lopo, J. E. (2022). The influence of technology-based learning media on student interest. *Jurnal Pendidikan dan Teknologi*, 10(4), 58–65.
- Kusuma, Y. A., & Cahyono, I. (2023). Integration of Google Classroom and Google Site to improve digital learning participation. *Jurnal Pendidikan Teknologi Informasi dan Komunikasi*, 6(2), 97–106.
- Nguyen, T. V. (2021). The effectiveness of online learning: Beyond no significant difference and future horizons. *MERLOT Journal of Online Learning and Teaching*, 11(2), 309–319.
- Ouyang, H. T., & Scharber, D. (2021). The influences of digital learning environments on student motivation and engagement. *Computers & Education*, 172, 104–241.
- Piaget, J. (1977). *The construction of reality in the child*. New York: Basic Books.
- Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, 16(4), 385–407.
- Rahmawati, M. S., & Hidayat, N. (2023). Digital literacy and online learning motivation among secondary students. *International Journal of Educational Technology in Higher Education*, 20(6), 75–86.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
- Slameto, S. (2013). *Belajar dan faktor-faktor yang mempengaruhinya* (7th ed.). Jakarta: Rineka Cipta.
- Umbara, D. (2022). The effectiveness of Google Sites-based learning on student engagement. *Jurnal Teknologi dan Pendidikan*, 8(3), 122–130.
- Wahyu, R. (2022). Utilization of Google Site as a learning medium. *Jurnal Media*

*Pembelajaran Digital, 4(1), 12–*  
19.