p-ISSN 2460-0768 e-ISSN 2597-6044
https://doi.org/10.20961/ge.v11i2.98696

GeoEco, Vol. 11, No 2. July 2025 Page. 394 - 412
https://jurnal.uns.ac.id/GeoEco/article/view/98696

DEVELOPMENT OF GOOGLE SITES LEARNING MEDIA TO INCREASE STUDENT LEARNING INTEREST IN GEOGRAPHY SUBJECTS AT SMAN 10 FAJAR HARAPAN BANDA ACEH

Safinatun Najah*, Ernawati
Master Program of Geography Education, Faculty of Social Sciences, Universitas Negeri Padang, Indonesia

*E-mail: safinatunnajah25@gmail.com

ARTICLE INFO

Article History
Received : 22/01/2025
Revised : 13/05/2025
Accepted : 07/06/2025

Citation:
Najah, S., and Ernawati., (2025) Development of Google Sites Learning Media to Increase Student Learning Interest in Geography Subjects at SMAN 10 Fajar Harapan Banda Aceh. GeoEco. Vol. 11, No.2.

ABSTRACT

This study aims to determine the feasibility of Google Sites learning media and the effect of using Google Sites learning media in increasing student interest in learning. The method used in research is the ADDIE model, which involves development research and experimental methods. Based on the study's results on learning media development, the Google site, expert validation results obtained from material experts by 95% criteria, are very suitable, and media experts by 76%. The results of data analysis from student questionnaires regarding student interest in learning geography in experimental and control classes obtained results in hypothesis testing show that the value of t count > t table, namely t count = 3.168, is greater than t table 1.999, then H0 is rejected. The calculated significance level is 0.002, which is smaller than 0.05 (Sig (2-tailed <0.05). This means that H0 is rejected, and Ha is accepted. It is concluded that there is a difference in student interest in learning geography between the control and experimental classes. Furthermore, from the results of the average interest value of the experimental class of 80.906 and the control class of 76.468, it is known that the average of the experimental class is higher than the average of the control class. It can be concluded that there is a significant effect of using Google Sites learning media to increase learning interest in learning geography of class X students at SMAN 10 Fajar Harapan.

Keywords: *Google Sites; Learning Media; Learning Interest*

INTRODUCTION

The development of science and technology has increasingly encouraged innovation in the use of technology in the learning process. Advances in science and technology affect teaching aids in schools and other educational institutions (Fitriya & Retnoningsih, 2023). Information and communication technology-based learning has changed media-based learning, including computer and internet media, giving rise to e-learning (U. H. Salsabila & Agustian, 2021). According to Susilo (2019), learning media is a tool that helps the learning process in presenting interesting material and makes learning situations

active and easy for students to understand. This improves learning quality and helps achieve learning objectives effectively and efficiently (Fah, 2024). Learning media can help learning activities that aim to clarify the meaning of learning so that learning objectives can be conveyed more ideally and perfectly (F. Salsabila & Aslam, 2022).

Media can be used as an instrument or a connecting container to convey messages or information from educators to students in understanding lessons. Learning media can also improve the quality of learning. As a way for teachers to help deliver learning materials in a comprehensive, creative and innovative way, attract student interest, and create a pleasant learning environment (F. Salsabila & Aslam, 2022). Student interest in learning is important in the smooth teaching and learning process. Students with a high interest in learning in the learning process can support the teaching and learning process to get better, and vice versa; low student interest in learning will reduce the quality of learning and will affect learning outcomes (Saputri et al., 2019).

One of the learning media that can be used to increase students' interest in learning is the use of the Google Sites application. Google Sites Learning Media is one of the applications on Google that can be used to create learning media (Meldiana & Nurhamidah, 2024). Google Sites is a structured application that can easily create websites. The advantages of Google Sites are that they are free and easy to create, they have facilities for collaboration, online storage is available, and they are searchable (Irawan et al., 2023). Google Sites is an example of a form of TPACK (Technological Pedagogical and Content Knowledge), which is a framework that combines three important elements in learning, namely Technology (technological knowledge), Pedagogy (pedagogical knowledge), and Content (content knowledge) (Janah, 2022). TPACK can be used as a reference for developing new learning models. The TPACK approach is expected to help educators apply technology in learning effectively and efficiently (Hernandez, 2017). TPACK (Technological Pedagogical and Content Knowledge),

TPACK (Pedagogical Technology and Content Knowledge) strongly supports the use of Google Sites in the learning process as it ensures that teachers can use the website and understand how the technology can enhance teaching strategies (pedagogy) and improve

students' understanding of learning content. This shows that developing TPACK-based teaching materials, assisted by Google Sites, can improve students' critical thinking skills. Teachers with a strong understanding of TPACK will design activities on Google Sites that present information and ask students to analyse, evaluate and synthesise information (Aziza et al., 2024).

Based on the explanation and information above and the results of preliminary observations conducted through interviews with subject teachers, it was found that the teacher uses lecture, discussion and demonstration methods in the geography learning process. The learning media used are printed books, PowerPoint, and modules. Learning media make it easier for students to understand learning materials, but not all learning media can facilitate learning optimally. The learning process caused by not maximizing one of them is due to the media used, which is less interesting, so that the lack of interest in learning from students, especially now that technological media plays an important role in learning by using technological media in learning can increase students' interest in the learning process.

In the learning process using Google Sites learning media, teachers hope that this technology-based learning media can help students in the learning process, both at school and outside. Moreover, this media can increase creativity and critical thinking for students, increasing their interest in learning, especially in geography learning (Puspitarini et al., 2019).

The researcher chose SMAN 10 Fajar Harapan Banda Aceh because the school has student characteristics (grade level, initial ability, interest in Geography) that align with the research objectives. In the research, the initial conjecture is that the interest in learning Geography at the school requires improvement, making it suitable for the Implementation of Google Sites media, and has supporting facilities such as adequate internet access, computers/laptops, or projectors that can support the use of digital media.

Based on the description explained above, in the end, it interests researchers to conduct research that is expected to provide an overview of the development of learning media by utilising Google Sites that can increase student learning interest in geography subjects. For this reason, this research is entitled "Development of Google Sites Learning

Media to Increase Student Learning Interest in Geography Subjects at SMAN 10 Fajar Harapan Banda Aceh".

MATERIALS AND METHODS

The type of research used in this research is Research and Development (R&D) using the ADDIE Model. The research and development method is a research method used to produce a specific product and test the effectiveness of the product (Sugiyono, 2019). This study also used an experimental research design. The experimental method used in this research is an experimental design (pseudo-experiment) with the design in this study, namely Posttest-Only Control Group Design (Siyoto & Sodik, 2015). The population in this study were Class X students at SMAN 10 Fajar Harapan Banda Aceh. Sampling was done with a purposive sampling technique. The sampling technique with purposive sampling is a sampling technique with specific considerations. The samples used in this study were two classes from class X. 2, totalling 32 students and class X.3, totalling 32 students. These two classes have a low interest in learning or interest in geography lessons compared to other classes. Of the two classes, one class was grouped into an experimental class that received treatment (X.3) and another was a control class, namely a class that did not receive treatment (X.2).

The Development Research Procedure includes several steps, including the Analysis Stage. At this stage, the main activities are analysing the need for developing new learning models/methods/media and the feasibility and requirements of developing new learning models/methods/media. Interviews were conducted with geography teachers at SMAN 10 Fajar Harapan Banda Aceh. Design Stage (Design): In this research, the product was designed in the form of Goole Sites as the main media in developing learning media on geography subjects. Product Manufacturing (Development). In this development stage, the media that will be produced to be tested with students is in the form of Google Sites learning media that contains material. Implementation Stage (Implementation), Implementation is the stage for testing the learning media. Google Sites learning media will be tested by material experts and media experts after the learning media is declared feasible by experts. The media is tested, and product trials are carried out by demonstrating the process of learning material using Google Sites media.

Evaluation (evaluation), At this stage, the researcher assessed the results of the questionnaire filled in by the students.

The data analysis techniques used in this study include expert validation tests, expert validation in the form of media and material experts and learning interest questionnaire tests using a Likert scale. To calculate the percentage of feasibility by the validator team, the formula put forward by Sa'adah (2020) is:

$$P = \frac{f}{n} \text{ x } 100\% \quad (1)$$

Description

P = percentage (%)

f = the acquisition of scores from validators

n = maximum score

Then the assessment criteria used for the learning media developed can be seen in **Table 1.**

Table 1. Assessment Criteria for Learning Media

No.	Value (%)	Qualitative criteria
1.	81-100	Very suitable
2.	61-80	As per
3.	41-60	Suitability
4.	21-40	Not quite right
5.	0-20	Not suitable

Source: (Sa'adah, 2020)

Furthermore, the data analysis technique for the student interest questionnaire includes validity and reliability tests, such as normality tests, homogeneity tests, and hypothesis testing.

Validity Test

Validity shows how much a measuring instrument can measure what you want to measure. A valid instrument is an instrument that can show the extent to which a measuring instrument can be used to measure what is to be measured (Sugiyono, 2019). The instrument validity test in this study uses the Product-Moment Correlation formula, with the following formula:

$$Rxy \frac{n(\Sigma XY) - \Sigma(X)\Sigma(Y)}{\sqrt{[n(\Sigma X^2) - \Sigma(X)^2][n(\Sigma Y^2) - \Sigma(Y)^2]}} (2)$$

Description:

Rxy = correlation coefficient between X and Y

n = Number of respondents

∑XiYi =The Sum of multiplication between X and Y scores

∑Xi = Number of item scores

∑Yi = Sum of total scores

∑Xi2 = Sum of squares of items

scores

$\sum Yi2$ = Sum of squares of total scores

With the test criteria, if the value of r count ≥ r_{table}. Then the statement item is valid and vice versa; if $r_{count} < r_{table}$, then the statement item is invalid.

Reliability test

A reliable instrument is an instrument that, when used several times, will produce the same data. Reliability aims to determine the extent to which the measurement results remain consistent when measuring two or more times against the same symptoms using the same measuring device (Sukardi, 2018). To test the reliability of the instrument using the Cronbach's Alpha formula.

$$r_{11} = \left[\frac{k}{k-1}\right]\left[1 - \frac{\sum\sigma_b^2}{\sigma_t^2}\right] \quad (3)$$

Description:

r_{11} = Instrument reliability coefficient

k = Number of question items

$\sum\sigma_b^2$ = Number of item variants

σ_t^2 = Total variation

The value of r_{11} is then compared with r_{table} with the decision rule that if $r_{(11)}$>0.6, it is said to be reliable; otherwise, if r_{11}≤0.6, the instrument is unreliable. After testing the validity and reliability, the next stage tests normality, homogeneity, and hypothesis testing. For this test, the data analysis technique was used with the help of SPSS.

RESULTS AND DISCUSSION

Product Development Results

Based on the steps of research and development using the ADDIE model (Analysis, Design, Development, Implementation, Evaluation), this section will explain how the media development process has been developed through Google Sites learning media. Furthermore, the media development steps can be seen as follows:

Analysis

Researchers interviewed geography teachers at SMAN 10 Fajar Harapan Banda Aceh at this stage. The interview was conducted with the geography teacher, where the geography teacher said that the teacher used lecture, discussion and demonstration methods in the geography learning process. Based on these problems, according to researchers, students need learning media in helping teaching and learning activities that are interesting, easy to understand, can be demonstrated directly by students and can

be used in the learning process when they are at school or outside school. Therefore, researchers try to develop technology-based learning media in the form of Google Sites,

Design

The design activity in the ADDIE development research model is a systematic process that starts from designing the concept and content of the product. The design is written for each product's content. Instructions for implementing the design or making the product are written clearly and in detail. At this stage, the researcher designed the media and material design (Herliana et al., 2024).

Development

The following step is the development stage, which is an advanced stage of design, media design that will be developed into a teaching media, media containing text, images, videos and websites. Learning media has been created and designed based on the stages that have been determined, to produce a learning media product using Google Sites on Map material, Remote Sensing and Geographic Information Systems. The display of learning media using Google Sites is shown in **Figures 1** and **2**.

Figure 1. Initial display of Google Sites learning media

p-ISSN 2460-0768 e-ISSN 2597-6044
https://doi.org/10.20961/ge.v11i2.98696
GeoEco, Vol. 11, No 2. July 2025 Page. 394 - 412
https://jurnal.uns.ac.id/GeoEco/article/view/98696

Figure 2. Initial display of Google Sites learning media (basic competencies and core competencies)

The appearance of the meeting menu, which is equipped with material in the form of PowerPoint presentations, learning videos, and quizzes on learning media using Google Sites, is shown in **Figure 3**.

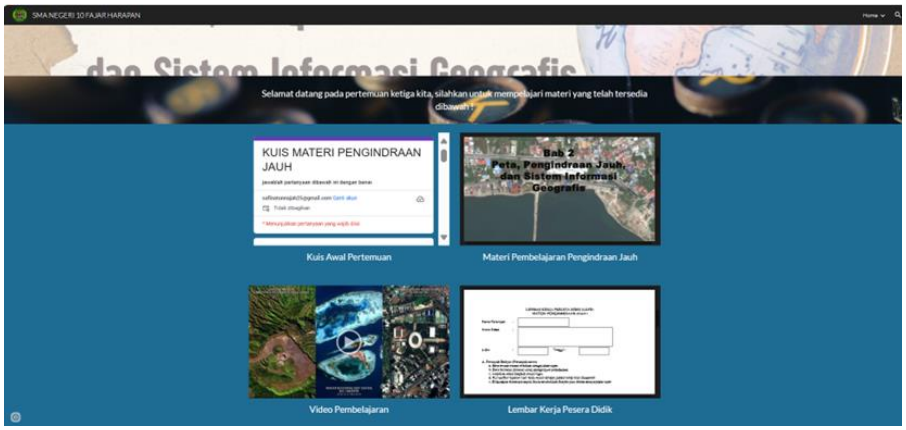

Figure 3. The page in the meeting menu contains quizzes, learning materials, videos, and learner worksheets

In the meeting menu, there are several learning materials packaged in the form of PowerPoint, learning videos, quizzes and learning websites, making it easy for students to listen and understand what is being delivered.

Implementation

Learning media using Google Sites for map material, remote sensing and geographic information systems has been developed through a validation process to determine whether a product is feasible. The learning media using Google Sites

that has been developed has been validated by material experts and media experts. Furthermore, researchers conducted a trial of the media with students in class X-3, totalling 32 students (experimental class) at SMAN 10 Fajar Harapan Banda Aceh. This trial aimed to find out how each student responded to the learning media made by researchers using Google Sites. Each student was given the media directly by the researcher. At the implementation stage, the trial use of Google Sites learning media was carried out in 2 meetings. After the trial use of learning media, students were given a questionnaire to fill in to assess learning interest, and whether Google Sites learning media can increase students' interest in learning geography.

Evaluation

The learning media created using Google Sites begins with several stages. This stage includes validation, which produces suggestions and input, as well as the final results of the trials that have been carried out. In the expert validation stage, the researcher considers whether there is input from the examiner to improve the product, so that, based on the input and suggestions from the examiner, the product becomes suitable for use. Material expert validation obtained an average score of 4.73, with a percentage of 95%, with Very Suitable criteria and media expert validation average score of (3.81), with a percentage of (76%) with Decent criteria. From the results of expert validation, the suitability of the material on Google Sites learning media is considered very appropriate to the Geography material taught. This shows that the content presented is relevant and accurate. Media experts consider media feasibility from technical aspects and media design (appearance, navigation, functionality) excellent. This means that Google Sites is well designed, easy to use, and visually appealing. The effect of increasing learning interest from the trial results, which shows an increase in learning interest, also indirectly indicates that this media appeals to students. Furthermore, for the revision section by media experts, some parts of the learning material are more thorough and detailed. So that students can learn the material well.

Moreover, at the evaluation stage, the researcher assessed the results of the questionnaire filled out by students. Furthermore, student understanding is learned after using Google Sites learning media. The results of interviews

conducted with students show that Google Sites learning media attracts students to geography learning. According to students' Google Sites, media is easy to use, can be used anywhere, and can be used as additional material for learning at home.

In line with the results of previous research conducted by (Firgiansyach, 2023) Research on Learning Media Development Using Google Sites on Indonesian Cultural Diversity Material in Class XI IPS SMA Negeri 1 Gorontalo, by Meidy Firgiansyach Nayu, this study has a research objective, namely to develop learning media using google sites on Geography Subjects on Indonesian cultural diversity material. The research and development method (R&D) uses the ADDIE development model with five stages, including Analysis, Design, Development, Implementation, and Evaluation. The study results indicate that learning media development using Google Sites has passed the validity trial by material and media experts, and the results of student responses to learning media using Google Sites are 85.66%. The equation of this research with the research to be carried out is from the method used, namely research and development (R&D) using the ADDIE model with five stages and in geography subjects. The difference is in the research objectives and material on geography subjects.

Feasibility of Google Sites Learning Media

Data from the validation results of Google Sites learning media on map material, remote sensing, and geographic information. Information systems by experts. Validation of learning media carried out aims to determine the advantages and disadvantages of the media and materials that have been developed. Validation is divided into two categories, namely, Material and Media. The results of Validation by Material Experts and Media Experts, From the validation results show that the results of the material expert validation obtained an average score of (4.73), with a percentage of (95%) with Very Suitable criteria and media expert validation average score of (3.81), with a percentage of (76%) with Decent criteria. So it can be concluded that Google Sites learning media with Map material, Remote Sensing and Geographic Information Systems are suitable for use as learning media.

The Effect of Google Sites Learning Media Development on Increasing Learning Interest

Validity of Geography Study Interest Questionnaire

Researchers used manual calculations to determine the validity value of the questionnaire data. The validity test calculation formula used in this study uses product-moment correlation by comparing rcount and r_{table}. The value of r_{table} at a significant level of 0.05 and degrees of freedom (dk) = 15 - 2 = 13, so that the obtained value of r_{table} is 0.5140, with the test criteria if the value of $r_{(hit)} \geq r_{table.}$ Then the statement item is valid and vice versa if $r_{(count)} < r_{(table),}$ then the statement item is invalid.

From the results of the statement in the questionnaire of students' interest in learning geography that was tested, the results of all statement items totaling 20 statements were valid, because the tabulation results obtained the value of $r_{(count)} \geq r_{table,}$ in statement one with the results of rcount of 0.6.517 and rtabel of 0.5140 from the results tersbeut makanta declared valid.

Reliability Test

This study uses the Cronbach's alpha method to test its reliability. Researchers manually used Cronbach's Alpha statistics to test reliability. According to the criteria, a tool is considered reliable if the value of the Cronbach Alpha statistical test is greater than 0.6. If the value is lower than 0.6, it is considered unreliable. Based on the results of the above calculations, the value$r_{11} = 0{,}914 > 0.60$, it can be concluded that the research instrument on interest in learning geography is declared reliable.

Normality Test

The normality test in this study, the normality test using the Shapiro-Wilk test, was not carried out manually, but using the IBM Statistical Package for the Social Sciences (SPSS) version 27.0 application. In the Shapiro-Wilk test, normally distributed data is data greater than 0.05 at the 5% significance level. For more details, the results of the normality test calculation using the Shapiro-Wilk test using the IBM SPSS version 23 Windows application on post-test data are shown in **Table 2**:

Table 2. Tests of Normality

Tests of Normality							
	Class	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Group	Control	.113	32	.200*	.954	32	.191
	Experiment	.126	32	.200*	.977	32	.702

***. This is a lower bound of the true significance.**
a. Lilliefors Significance Correction
Source: SPSS Analysis, 2024

From the table of results calculation of the normality test on the data of the control and experimental class results using the Shapiro-Wilk test above, it can be seen that the control class group obtained a significance value of 0.191 and the experimental class group obtained a significance value of 0.702. These results show that the significance value of the control and experimental groups is > 0.05, so it can be concluded that the data from the control and experimental classes are normally distributed.

Homogeneity

This study's homogeneity test was assisted using the IBM SPSS 27.0 application with the F test. The formulation of the hypothesis test used in the homogeneity test is as follows:
a. sig. Value <0.05, then the variances of two or more population groups or data samples are not homogeneous.
b. If the sig. > 0.05, then the variance of two or more population groups or data samples is homogeneous.

The results of calculating the homogeneity test using the F test using the IBM SPSS version 27.0 application on post-test data are shown in **Table 3**:

Table 3. Tests of Homogeneity of Variances

Tests of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
F test Control and experimental class Interest in Learning Geography	Based on the Mean	.063	1	62	.803
	Based on the Median	.081	1	62	.777
	Based on Median and with adjusted df	.081	1	60.923	.777
	Based on the trimmed mean	.054	1	62	.817

Source: SPSS Analysis, 2024

It was found that the significance value of the experimental and control classes showed a result of 0.803. These results show that the significance value of the control and experimental classes is> 0.05, so it can be concluded that the data from

the results of the control and experimental classes have the same variance or are homogeneous.

Hypothesis Test

The hypothesis test analysis used in this study uses data analysis using parametric statistics, namely the Independent Sample T-test. The data processed in the t-test is post-test data. The decision-making criteria are as follows:

a. The significance value (2-tailed) > 0.05, then H0 is rejected (there is no difference between experimental and control classes on students' interest in learning geography).
b. The significance value (2-tailed) <0.05, then Ha is accepted (there is a difference between experimental and control classes on students' interest in learning geography).

The results of calculating the hypothesis test using the Independent Samples Test using the IBM SPSS version 27.0 application on post-test data are shown in **Table 4**:

Table 4. Independent Samples Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig.(2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the difference	
									Lower	Upper
Interest in Learning Geography	Equal variances assumed	.063	.803	3.168	62	.002	4.438	1.401	1.637	7.238
	Equal variances not assumed.			3.168	61.975	.002	4.438	1.401	1.637	7.238

Source: SPSS Analysis, 2024

From the calculation table data above, it can be seen that, based on the explanation above, the t-test will assume that both variances are equal (equal variances assumed). It can be seen that the t calculated value for equal variance is 3.168 with a significance level of 0.02. Based on Table 0.025, the t value for df = 682 is 1.999. The results show that the value of t (count) > t (table), namely t count = 3.168, is greater than t table 1.999, so H0 is rejected. The calculated significance level is 0.002, which is smaller than 0.05 (Sig (2-tailed <0.05).

This means that H0 is rejected, and Ha is accepted. So it can be concluded that there is a difference in students' interest in learning geography between the control and experimental classes.

From the SPSS calculation, it can also be seen that the average interest value of the experimental class is higher. This can be interpreted that the treatment increased students' interest in learning. Judging from the mean (average) of learning interest, it is known that the mean of the experimental class is higher than the mean of the control class. The difference in mean score of learning interest between the control class and the experimental class can be seen in **Table 5** below:

Table 5. Mean Score Table

Class	N	Mean	Std.Deviation	Std. Error Mean
experimental class	32	80.9063	5.65890	1.00036
control class	32	76.4688	5.54736	.98064

Source: SPSS Analysis, 2024

Based on Table 5, the average of the experimental class is 80.906, and the control class is 76.468; the average experimental score is higher, which indicates learning treatment using Google Sites media. It can be concluded that there is a significant effect of using Google learning media in learning geography to increase the learning interest of class X students at SMAN 10 Fajar Harapan.

The use of Google Sites has a significant effect on increasing students' interest in learning. It can be seen directly the effectiveness of the media in research that shows students are involved in filling out a learning interest questionnaire after using Google Sites and getting a response that indicates a positive response. Feasibility of learning media. The results showed that learning media using Google Sites had passed the material and media expert validity test, with an average percentage of material suitability and media feasibility from experts. This indicates that the media is well-designed, relevant, and meets pedagogical standards. The introduction of Google Sites learning media and its learning process shows innovation in delivering material. Media can present information in a more interesting and varied way than traditional methods, which can attract attention and maintain student focus.

Learning media is one of the factors that influence learning interest. Students' interest in learning can also be influenced by learning media materials with an attraction to learn. Using interesting

learning media can make it easier for students to learn and store memories in learning (Suryakarta,2009). Using learning media tools, students will be more stimulated to do learning activities actively, innovatively, creatively and also in a fun way. Learning media provided by teachers can increase students' interest in learning because students can be actively involved and can affect their psychology. Using learning media can help teachers create an effective learning process because it facilitates the delivery of messages in the material being explained (Putri et al., 2022). Technology-based media is one of the learning media that can help student interest and interest in learning. Digital media facilitates the learning process for teachers and students. They can understand the subject better and increase their interest in learning, which supports learning success. One form of digital technology-based learning media is Google Sites learning media (Siti Aisyah et al., 2025). According to Rizal (2023) google sites learning media is a learning media that can attract students' interest in learning, based on the results of research that has been conducted with the results that google sites technology-based media are interactive, engaging and easy to use, so that they can attract students' attention in the learning process. Google Sites influences students' interest in learning by providing interesting, flexible, interactive and easily accessible learning materials. With these features, students feel more engaged in learning and motivated to explore the material independently (Puspitawati et al., n.d.).

This study aims to determine the increase in student interest in learning geography lessons. Experiments were conducted using a control class (32 students) and an experimental class (32 students). The control class is a class that is not treated with learning using Google Sites, and the experimental class is treated using Google Sites learning. From the results of the student learning interest questionnaire that has been filled in, data analysis is carried out.

The final analysis carried out is hypothesis testing. Based on Table 0.025, the t value for df = 62 is 1.999. The results show that the value of t count> t table, namely t count = 3.168, is greater than t table 1.999, so H0 is rejected. The calculated significance level is 0.002, which is smaller than 0.05 (Sig (2-tailed <0.05). This means that H0 is rejected, and Ha is accepted. So it can be concluded that there is a difference in

students' interest in learning geography between the control and experimental classes. Moreover, the average results of the experimental class were 80.906, and the control class was 76.468; the average experimental score was higher, which received learning treatment using Google Sites media. It can be concluded that there is a significant effect of using Google Sites learning media in learning geography to increase the learning interest of class X students at SMAN 10 Fajar Harapan.

The results of the study are in line with the research of Aldiansyah & Mariya, (2024) which states that the use of Google Sites as a learning media is proven to increase students' interest in learning, which contributes to a more significant increase in their test scores between pre-test and post-test compared to the control group. The results showed that the experimental group using Google Sites had an average score of 87.73, while the control group using books and lectures had an average score of 48.93 out of 60 tests. The t-test results produced an Asymp. Sig. (2-tailed) of 0.000, which means less than 0.05.

CONCLUSIONS

Based on the results of the research obtained, it can be concluded from the formulation of problems in research with the title Development of Google Sites Learning Media to Increase Student Learning Interest in Geography Subjects at SMAN 10 Fajar Harapan Banda Aceh, that in the development of learning media using google sites using the ADDIE model. At the learning media development stage, the validation process is carried out by material experts and media experts. The scores given by material experts are 95% with Very Suitable criteria and media expert validation of 76% with Very Feasible criteria.

The validation results show that Google Sites learning media with Map material, Remote Sensing and Geographic Information Systems are feasible and effective to use as learning media. The effectiveness of Google Sites learning media is seen from the validity and feasibility. This media has systematically developed and is validated by experts, ensuring relevant, accurate content and pedagogical presentation. This feasibility level strongly indicates that this medium is suitable for learning purposes and can increase learning requests. The study

results show an increase in student interest in learning. This is due to the characteristics of Google Sites that allow the presentation of material in an interactive, visual, and possibly more interesting way than conventional methods to arouse student curiosity and engagement.

From the hypothesis test, it was found that H0 was rejected, and Ha was accepted. So it can be concluded that there is a difference in students' interest in learning geography between the control and experimental classes. Moreover, the average results of the experimental class were 80.906, and the control class was 76.468; the average experimental score was higher, which received learning treatment using Google Sites media. It can be concluded that there is a significant effect of using Google Sites learning media in learning geography to increase the learning interest of class X students at SMAN 10 Fajar Harapan.

Google Sites has advantages as a learning medium compared to other media, namely, (1) accessibility and ease of use as a web-based platform from Google. Google Sites is very easy for students to access anytime and anywhere as long as there is an internet connection. (2) Google Sites can be easily integrated with other Google products such as Google Drive (for file storage), Google Docs/Sheets/Slides (for materials), Google Forms (for evaluation), and YouTube (for videos). (3) The flexibility of content in Google Sites allows the presentation of various types of content, ranging from text, images, videos, interactive maps, to documents. This allows teachers to present geography materials comprehensively and multidimensionally, according to the needs of materials that often require visualisation and spatial data.

The application of this media will indirectly improve the digital literacy skills of teachers (in content development) and students (in the utilisation of digital learning resources). With media that can be accessed independently, students can repeat material or explore topics outside of class hours, encouraging a culture of self-learning and exploration. Furthermore, Google Sites can be the foundation for continuously developing school digital learning media. Teachers can constantly update and add new content, keeping the material relevant and engaging.

REFERENCES

Aldiansyah, I., & Mariya, S. (2024). Penerapan Google Sites Sebagai Media Pembelajaran Pada Materi Objek Studi Geografi Dalam Upaya Meningkatkan Minat Belajar Siswa Kelas X Di Sma Negeri 1 Sarolangun. 8.

Aziza, A., Baroroh, K., & Faculty Of Economics And Business, Yogyakarta State University, Yogyakarta, Indonesia. (2024). Development Of Google Sites-Based Social Science Learning Media To Increase Students' Critical Thinking Ability. International Journal Of Multidisciplinary Research And Analysis, 07(05). Https://Doi.Org/10.47191/Ijmra/V7-I05-12

Fah, S. (2024). Pengembangan Media Pembelajaran Berbasis Web Google Sites Pada Materi Reaksi Redoks Terintegrasi Nilai Islam. Konfigurasi : Jurnal Pendidikan Kimia Dan Terapan, 8(1), 41. Https://Doi.Org/10.24014/Konfigurasi.V8i1.28829

Firgiansyach. (2023). Pengembangan Media Pembelajaran Menggunakan Google Sites Pada Materi Keragaman Budaya Indonesia Di Kelas Xi Ips Sma Negeri 1 Gorontalo. Universitas Negeri Gorontalo.

Fitriya, S., & Retnoningsih, D. A. (2023). Pengembangan Media Pembelajaran Ladingbome (Skala & Perbandingan Board Game) Untuk Meningkatkan Motivasi Belajar Siswa Sekolah Dasar. 13(1).

Herliana, F., Elisa, & Syukri, M. (2024). Use Of Google Sites As A Web-Based Learning Media In Physics Learning For High School Teachers In Langsa City. Sarwahita, 21(02), 192–201. Https://Doi.Org/10.21009/Sarwahita.212.7

Hernandez, R. M. (2017). Impacto De Las Tic En La Educación: Retos Y Perspectivas. Propósitos Y Representaciones, 5(1), 325. Https://Doi.Org/10.20511/Pyr2017.V5n1.149

Irawan, D., Mulyati, M., Suhendra, R. N., Ferwani, S., Lumbantoruan, D. Y. R., Putri, M., Salma, K. S., & Febriani, Y. N. (2023). Penggunaan Media Pembelajaran Google Sites Fiksi Dan Nonfiksi Bahasa Indonesia Kelas Vii Sekolah Menengah Pertama Negeri 2 Tanjungpinang. Journal Of Education Research, 4(3), 1275–1283. Https://Doi.Org/10.37985/Jer.V4i3.339

Janah, E. F. (2022). Konsep Dan Implementasi Tpack Pada Pembelajaran Di Sekolah Dasar. Kalam Cendekia: Jurnal Ilmiah Kependidikan, 10(2), 348. Https://Doi.Org/10.20961/Jkc.V10i2.65655

Meldiana, C., & Nurhamidah, D. (2024). Efektivitas Media Google Sites Dalam Pembelajaran Bahasa Indonesia Kelas Vii Smp. Deiksis : Jurnal Pendidikan Bahasa Dan Sastra Indonesia, 10(1), 1–15. Https://Doi.Org/10.33603/8h069526

Puspitarini, Y. D., Hanif, M., & Educational Technology Program, Universitas Sebelas Maret, Indonesia, Muhammadhanif@Student.Uns.Ac.Id. (2019). Using Learning Media

To Increase Learning Motivation In Elementary School. Anatolian Journal Of Education, 4(2), 53–60. Https://Doi.Org/10.29333/Aje.2019.426a

Puspitawati, P. D., Yulisetiani, S., & No, R. (N.D.). Analisis Penggunaan Media Google Sites Dalam Implementasi Pembelajaran Berdiferensiasi Pada Materi Teks Deskripsi Kelas Iv Sekolah Dasar.

Putri, D. J., Angelina, S., Rahma, S. C., & Mujazi, M. (2022). Faktor-Faktor Yang Mempengaruhi Minat Belajar Siswa Di Kecamatan Larangan Tangerang. 5.

Rizal, I. (2023). Efektivitas Media Pembelajaran Google Sites Untuk Meningkatkan Minat Belajar Mata Pelajaran Mesin Bubut Smk Negeri 1 Padang.

Sa'adah, N, R., & Wahyu. (2020). Metode Penelitian R&D (Research And Development). Literasi Nusantara.

Salsabila, F., & Aslam, A. (2022). Pengembangan Media Pembelajaran Berbasis Web Google Sites Pada Pembelajaran Ipa Sekolah Dasar. Jurnal Basicedu, 6(4), 6088–6096. Https://Doi.Org/10.31004/Basicedu.V6i4.3155

Salsabila, U. H., & Agustian, N. (2021). Peran Teknologi Pendidikan Dalam Pembelajaran. 3.

Saputri, D., Ahmad, S., & Lestari, N. D. (2019). Hubungan Motivasi Belajar Siswa Dan Pendapatan Orang Tua Terhadap Minat Melanjutkan Studi Ke Perguruan Tinggi Smk Negeri 1 Palembang Tahun Pelajaran 2018/2019.

Siti Aisyah, Ayu Fitriya Ramadani, Anggita Eka Wulandari, & Choli Astutik. (2025). Pemanfaatan Teknologi Digital Sebagai Media Pembelajaran Interaktif Untuk Siswa Sekolah Dasar. Jurnal Sadewa : Publikasi Ilmu Pendidikan, Pembelajaran Dan Ilmu Sosial, 3(1), 388–401. Https://Doi.Org/10.61132/Sadewa.V3i1.1565

Siyoto, S., & Sodik, A. (2015). Dasar Metodologi Penelitian. Literasi Media Publishing.

Sugiyono. (2019). Metode Penelitian Kuantitatif, Kualitatif, Dan R&D. Cv. Alfabeta.

Sukardi. (2018). Metodologi Penelitian Pendidikan. Bumi Aksara.

Suryakarta, S. (2009). Lingkungan Fisik Dan Sosial. Pusat Perbukuan.

Susilo, M. A. (2019). Pengembangan Media Pembelajaran Berbasis Aplikasi Android Untuk Meningkatkan Hasil Belajar Kognitif Pada Pembelajaran Wheel Alignment. 19(2).