

Development of Learning Media Based on *Google Sites* on the Material I Am a Pancasila Student for Third Grade Elementary School Students

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ABSTRACT

This study focuses on obtaining valid Google Sites media, so it is said to be suitable for use in the learning process. This research aims to create interactive media based on Google Sites for the “I am a pancasila student” material in grade 3 of elementary school during learning activities. This study is a research and development type, utilizing the simplified ADDIE model, which includes the stages of analysis, design, and development. The data collected in this development are both qualitative and quantitative. The trial was conducted on a small scale, with a sample of 10 student’s representing various learning achievement categories. Data collection techniques involved two instruments: first, questionnaires for teacher and students, and second, validation sheets for material experts, media experts, and language experts. Based on study’s results, media experts scored 90.83% material experts 99.16% and language experts 100% with an overall validity score of 90.32%, indicating that the media is highly valid for use as a learning tool. Teacher responses and student responses experts both scored 100% resulting in an overall score of 100% categorized as “very valid”. Google Sites-based learning media developed is valid suitable for use in learning activities.

Keywords: *development, google sites, grade III elementary school students*

Submitted	Accepted	Published
10 April 2025	22 May 2025	30 May 2025

Citation	:	Kurniawati, S., & Ramadan, Z.H. (2025). Development of Learning Media Based on <i>Google Sites</i> on the Material I Am a Pancasila Student for Third Grade Elementary School Students. <i>Jurnal PAJAR (Pendidikan dan Pengajaran)</i> , 9(3), 432-442. DOI: http://dx.doi.org/10.33578/pjr.v9i3.118 .
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INTRODUCTION

The development of technology, information, and communication in the digital era has undergone a major shift significant effect on multiple dimensions in human existence, especially in the dimension from the world of education (Fadilah et al., 2021). The 21st century learning paradigm suggests that educators are required to be proficient in operating technology as a means of communication to create an innovative learning system (Maritsa et al., 2021). Technology helps humans to create an innovation that can help everyday human life and make a very draining job easier (Wulandari, 2023). This is in line with Permendikbud No. 22 of 2016 concerning the standards of the rough and secondary education process. The contents of the process standards that are more directed at this are the use of technology to improve the efficiency and effectiveness of learning (Mokol et al., 2022). During the process of instruction and learning the use and application related to technology in this classroom has become a necessity and a necessity in the global era (Rijal, 2020). Based on this, a tutor is required to be competent to implement an innovative learning system in the study process.

The implementation about the learning process includes interaction between educators and learners related to their respective scopes, and teachers provide the knowledge they have in order to obtain learning materials and skills and character development (Rosni, 2021). A teacher who has quality and professional skills can carry out learning activities effectively and innovatively (Salsabila & Aslam, 2022). In the learning process, teachers have a very important role. The obstacles faced by students in learning can be overcome by teachers who have professional skills (Zein, 2024). Therefore, in the modern era, teachers are highly demanded act as professional so that they are able to lure students to think in 4C (*Critical Thinking, Communication, Collaboration, and Creativity Thinking*) (Susanti et al., 2025). 4C competencies need to be applied in order to

equip students to be able to compete in the 21st century to maximize the achievement of learning objectives (Karakter et al., 2023).

The skills that teachers must have in the 21st century include being proficient in operating technology as a means of communicating and delivering material (Kusnadi, 2023). That learning media is a resource used by teachers to support learning activities, both in the form of hardware and software (Susilo & Sofiarini, 2020). Therefore, learning media is the main means in the learning process, because it is increasingly needed to overcome various problems (Wibowo, 2022). That learning media has many benefits in accelerating the process of student insight into the material provided (Gustina, 2023). Media also plays a role as a means of strengthening informants to stimulate students' critical thinking and foster their learning motivation (Stai Kuala Kapuas & Tengah, 2024). Learning media is very important to be developed to attract students' enthusiasm, open their mindset to think in 4C (*Critical Thinking, Communication, Collaboration, and Creativity Thinking*), and make the learning system more interesting (Maulidah, 2021).

Based on interview result gathered by researchers from elementary school grade III homeroom teachers, it was obtained that teachers have utilized information and communication technology as a means of delivering materials such as the use of learning videos either from YouTube or from teachers that are made independently. However, in delivering the material, teachers refer to textbooks and use image media as a tool in explaining the material without any visualization used by the teacher so that the form is abstract, so that this condition causes students to have difficulty learning Citizenship Education (PKn), one of which is in the material I am a Pancasila Student in the form of (1) Lack of learning media provided by teachers, making students experience several learning problems such as boredom, sleepy, noisy, often asking for permission to leave the class. (2) The absence of learning media in Pancasila Education lessons on the material I am a Pancasila Student.

This study will develop *Google Sites* material-oriented learning media I am a Pancasila student for grade III Elementary School students. Such implication about this research is to create *Google Sites* problem-based learning media on this material I am a Pancasila Student to promote positive attitudes in students positive attitude towards the learning materials utilized made student feel engaged and happy *Google Sites* -based learning media . In relation to the benefits of Google Sites, namely: (1) Through employing *Google Sites*, students can feel enthusiastic in learning activities (2) The *Google Sites* page presents connected learning topics so that students study various references anytime and anywhere, (3) Because the material has not been updated automatically, *Google Sites* users can access the material from the beginning of the lesson to the end, (4) students can send and upload assignments that have been given their assignments individually (5) *Google Sites* can share information individually about assignments or other information (Rosiyana, 2021).

METHOD

The type of research used is the development of the ADDIE model citing to (Safitri et al., 2022) defining the ADDIE model as part of the framework used in designing learning media which includes five main steps. The stages comprises the phases of *Analysis, design, development, implementation, and evaluation*. this study narrows its scope to the development stage. And in this research using qualitative and quantitative methods.

a. Analysis Stage

1. Curriculum Analysis, aims to identify what curriculum is currently being used for students.
2. Needs analysis, this analysis is conducted by interviewing teachers and students regarding the media used and the condition of students during the learning process.
3. Material analysis, the purpose of this analysis is to identify the material used in class III.

b. Design Stage

Design is the design stage of *the Google Sites display* which will be developed and made into a learning media product.

c. Development Stage

The current development process is the validity test. Validity Test is carried out through experts in their fields called validators. Validators provide an assessment to review the advantages and shortcomings of the learning media developed using *google sites*. The results of this validation stage are used to improve and perfect the learning media developed using *google sites* that researchers have created. The assessment of the learning media is carried out by filling out a validation questionnaire for each expert, in particular experts, linguistics experts, and media experts.

This research was conducted at SDN 35 Pekanbaru, Jalan Pemuda, Gang Sekolah, Tampan, Payung Sekaki District, Pekanbaru City, Riau. The research time was carried out from January to May 2025, with the research subjects in this study consisting of 6 validators, teachers and students and also using research instruments including interviews and validation sheets. The following in **Table 1**, **Table 2**, and **Table 3** are the validation instrument grids conducted by material specialists, language experts and the media experts.

Table 1. Instrument grid for material experts

Assessment Aspects	Indicator
Relevance of Material	Suitability of material with basic competencies Suitability of material with the independent curriculum Completeness of Materials Sequence of presentation of material
Presentation	Presentation techniques Balance Easy to understand material

Source: (Ningsih, 2020) modified by researcher

Table 2. Instrument grid for linguists

Assessment Aspects	Indicator
Straightforward	Language used
Conformity to language rules	Language accuracy
Communicative	Understanding of messages or information
Compliance with student development	Compliance with students' intellectual development
Coherence and integration of thought flow	Coherence and integration between learning activities
Politeness in the use of language	Use of language according to educational values

Source: (Ningsih, 2020) modified by researcher

Table 3. Instrument grid for media experts

Assessment aspects	Indicator
Making	<i>Google Sites</i> View Form of writing Image display Layout Text color Color with background Media effectiveness
Governance	Ease of use of media Ease of media storage
Rules	The learning process is more interesting

Source: (Ningsih, 2020) modified by researcher

The methods for data collection in this research include interviews and questionnaires. In qualitative research, interviews are often used to understand respondents' views, experiences, or perceptions of a particular phenomenon. Quantitative data is data in the form of numbers, namely the score obtained from the validator which is determined from validation by 2 instructional material validators for the *Google Sites* platform, 2 media experts on learning media built on *Google Sites*, 2 language experts on learning media developed through *Google Sites*. The Likert scale is used to assess material, language, media, and teacher responses to educational media using *Google Sites* to evaluate the feasibility of this learning media product. Here are the steps:

- 1) The answer scores are Very Good (4), Good (3), Sufficient (2), Less (1).
- 2) Assign a number to each response
- 3) Summing up all scores with respect to the indications given by the validator.
- 4) Use the formula to get the validity value:

$$V = \frac{Tse}{Tsh} \times 100\%$$

Explanation :

V : Combined validity

Tse : Sum of empirical scores obtained (experts validation findings)

Tsh : Total maximum score

- 5) The researcher then determined that the high percentage score of the data analysis results indicated the level of suitability of the goods from the *Google Sites* learning media development study.

Table 4. Product Validity Level

No	Validity Criteria	Validity Level
1.	85.1% - 100%	Proven valid, revision not necessary
2.	70.1% - 85%	Fairly valid, usable with slight modifications
3.	50.1% - 70%	Low validity, major revisions required before use
4.	01% - 50%	Not valid, therefore unusable

Source: Akbar (in Safitri & Fadillah, 2021 : 66)

The analysis of the feasibility of the developed learning media uses data from student response questionnaires aimed at determining students' reactions to *Google Sites* supported educational media designed by researchers. In this measurement to analyze pupil responses using the Guttman scale. The calculation formula for the results of student response scores is as follows:

$$P = \frac{F}{N} \times 100\%$$

Explanation :

P : Final result

F : Point earned

N : Maximum points

Table 5. Practicality level criteria

No	Presentation	Criteria
1	0% - 20%	Impractical
2	21% - 40%	Less efficient
3	41% - 60%	Enough
4	61% - 80%	Practical
5	81% - 100%	Very Practical

RESULTS AND DISCUSSION

Analysis phase

The results of the analysis stage are that in the learning process, teachers only use text in books as learning media and lecture methods, including in civic education lessons. The application of learning media to improve the efficiency and learning standards of students is also unusual. Then characterizing student needs, it is found that students need open materials that they read to have interesting pictures, and also the entire text. In addition to being boring, interest in reading is also lacking. After collecting data, researchers considered what was desired in student needs to design effective and widely used learning tools. Researchers made a conscious decision to include the material in the *Google Sites* learning platform. In addition, researchers looked at the curriculum used and Basic Competencies (KD) in class III to see what could be used as a benchmark in making this learning media. Furthermore, making learning media developed with *Google Sites* with this material I am a Pancasila student.

Design phase

At this phase, the researcher created a learning media developed with *Google sites* which are based on the characteristics of grade III students. The following are the steps taken by the researcher: After deciding he media, this researcher designed the cover display for the material I am a Pancasila student where the researcher chose the appropriate background. It looks like **Figure 1** below.



Figure 1. Google Sites Learning Media Cover

Next, use the insert feature to be able to change the size, font type, and color of the text, also insert images in the display section of the material, embed videos from Youtube directly into the site, insert Google forms (create UIs and student exercises), apply the page feature to compile and organize site content in a structured and separate manner based on specific topics, categories, and purposes. It looks like **figures 2, 3, and 4** below.



Figure 2. Display of Material on Google Sites Media



Figure 3. Display of Video Material from Youtube

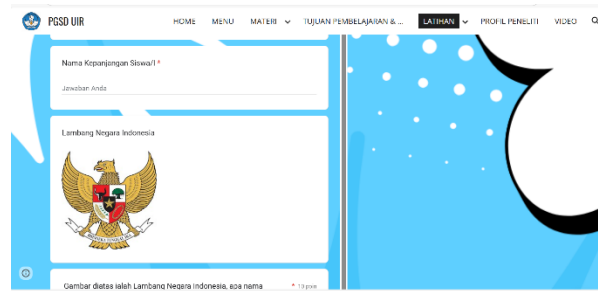


Figure 4. Google Form View for Practice

By creating different pages, the site will be easier to navigate, informative, and organized. It makes it simplifies things for students and teachers to reach relevant information. Using the theme feature is useful in providing an attractive, consistent, and professional design without requiring technical skills. By choosing and customizing a theme, we can create a site that looks neat, structured, and easy to use by visitors. Next, the last stage of the *Google Sites* site that was created is complete, press the "Publish" reading, then fill in the web address as desired. The outcomes of the learning media developed with *Google Sites* after being published is presented **Figure 5** below.

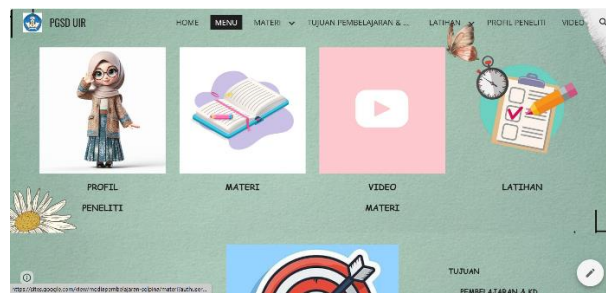


Figure 5. Menu Display After *Google Sites* Media is Published

Development Stage

At this stage of development, learning media based on *google sites* to test the validity of the media developed as learning media used by teachers and students. Validation of the material, language and learning media is carried out to check the completeness of the contents of the learning material and media or language used in the *google sites* learning media. Suggestions and input from the validation sheet for the feasibility of learning media developed with *google sites*.

Table 6. Material validation results

No	Validators	Percentage %		Criteria	
		Validation 1	Validation 2	Validation 1	Validation 2
1.	Validator One	100%	-	Very Valid	-
2.	Validator Two	98.33%	-	Very Valid	-

(source: processed data by researchers)

Table 6 is the score from the analysis of the learning material aspect contained inside the learning media product based on *google sites* material aku pelajar pancasila, the overall percentage of validator 1 is 100% that stated as extremely valid, with a percentage of 98.33% that stated as extremely valid, no revision necessary and is suitable for limited scale trials. In this validation, media experts were asked to evaluate the appearance aspect of the learning media product based on *google sites*. **Table 7** display the results of the media aspect assessment.

Table 7. Media validation results

No	Validators	Percentage %		Criteria	
		Validation 1	Validation 2	Validation 1	Validation 2
1.	Validator One	77.77%	91.66%	Quite valid	Very Valid
2.	Validator Two	95.83%	-	Very valid	-

(source: processed data by researchers)

Based on **Table 7** in validation section 1 shows the assessment result for the display and programming aspects of learning media products based on *google sites*, got a percentage score from validator 1 of 77.77% which is stated as quite acceptable and validator 2 achieved 95.83% which is stated as very valid. It should be revised once more, the following revisions provided both validators are shown by suggestions from validator 1, the researcher revised the animation movement that can move on the cover and also in the material section. Furthermore, the results of the assessment from the language expert in **Table 8**.

Table 8. Language validation results

No	Validators	Percentage %		Criteria	
		Validation 1	Validation 2	Validation 1	Validation 2
1.	Validator One	100%	-	Very valid	-
2.	Validator Two	100%	-	Very valid	-

(source: processed data by researchers)

Table 8 is the finding of the assessment of this learning language aspect contained in the *Google Sites* -based learning media product for the Aku Pelajar Pancasila material, the sum percentage given by validator 1 is 100% which is stated as extremely valid with a percentage of 100% which is stated as extremely valid no revision necessary and is suitable for a confined scale trials.

Table 9. Data recapitulation

Rated aspect	Validity Percentage (%)	
	Validation I	Validation II
Material aspects	99.16%	-
Media Aspects	86.80%	90.83%
Language Aspects	100%	-
Amount	95.32%	90.83%

(source: processed data by researchers)

Based on **Table 9** shows the expert team validator all aspects of learning media by material, media experts, and language experts during the initial and subsequent validation, as shown in **Figure 7**, it can be inferred that the quality of the media improved following expert validation, including material specialists, media reviewers, and language consultants. The feedback and recommendations provided are highly beneficial for creating valid media intended for use by teachers and third grade elementary students.

Implementation Stage

At this stage, the *google sites* -based learning media that has been developed is tested on students. After the *google sites media* is declared valid, the next step is to implement it in a limited trial. In this limited trial stage, the researcher tests its practicality by involving teachers and students. This limited trial involves a sample of 10 students. The purpose of this limited trial is to assess how much this *google sites media* is practical and user-friendly in the context of learning. This evaluation is based on the responses given by teachers and students

through filling out questionnaires, and the following are the feedback obtained from teachers and students in Table 10.

Table 10. Results of responses from teachers and students in grade III of elementary school

No	Name	Presentation	Criteria
1	Teacher	100%	Very Valid
2	Student	100%	Very Practical
	Average	100%	Very Practical

(source: processed data by researchers)

On the basis of the data in table 10, the homeroom teacher for class III gave a response with a percentage result of 100% indicating that media based on *Google sites* serving as instructional media is considered very valid by him. Showing data from limited-scale field trials involving 10 students, as recorded in the table. Showing that the total score obtained was 100 out of a maximum score of 100. This indicates that the student response from the limited-scale trial resulted in an average assessment of 100%. And shows that learning media developed utilizing *Google sites* for educational purposes that is well suited for application by students.

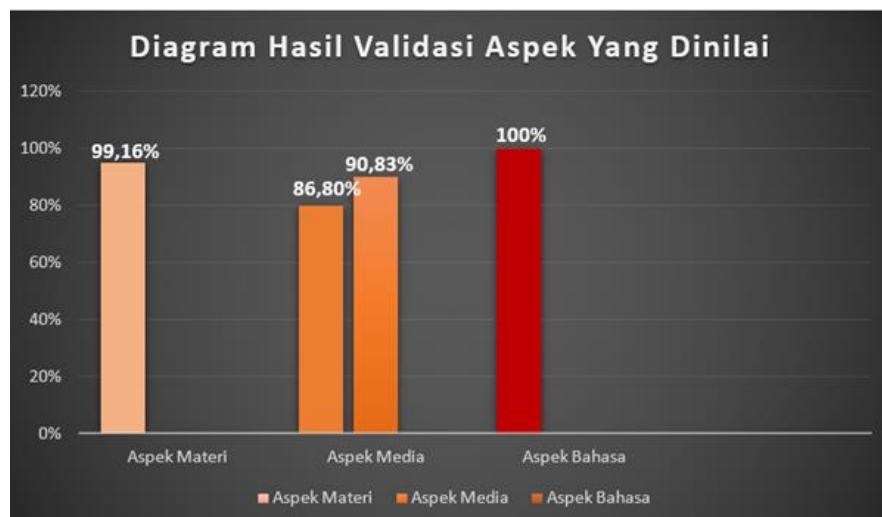


Figure 6. Validation data recapitulation diagram

Discussion

The results of research and development of teaching materials utilizing *Google Sites* in Citizenship Education learning are valid media. The procedure for developing learning media based on *Google Sites* is based on the simplified ADDIE model, that is because the time constraints of the research are only carried out up to the product development stage. A learning media will be said to be good and effective if it has good planning (Zahwa et al., 2022). Thus, this learning media developed in this study are in accordance with the planning prepared in the research and development stages carried out (Waruwu, 2024). The creation of learning media using *Google Sites* are preferred due to the platform's capacity to consolidate varied content like multimedia, documents, and text in one place, while also offering flexible sharing options tailored to its users (Cahyo Nugroho & Hendrastomo, 2021).

The development of learning media based on *Google Sites* is based on the simplified ADDIE model, that is because the moment constraints of the research were only carried out up to the product development stage. From the results of the development, it was carried out through 2 validator revisions on media experts, but the

Google Sites- based learning media had a final percentage for media feasibility, namely the material expert got a percentage of 99.16% with the category "very valid". Furthermore, validation from media experts got a percentage of 90.83% in the category "very valid" and the last was validation from language experts got a percentage of 100% in the category "very valid". At the during the execution phase, a practical assessment was carried out for teachers and students to respond and assess the *Google Sites* -based learning media that would be applied in the learning educational process. Instructors and pupils were asked to fill out in their responses on the prepared questionnaire sheet, meanwhile the aim of the testing phase was to observe and collect information regarding feedback on the developed media. Feedback from students on the learning media developed using *google sites* was positive, with many indicating that it was highly effective for learning purposes.

This is in line with previous research aimed at developing learning media based on *google sites* as a learning media to improve student learning achievement. (Islanda & Darmawan, 2023). The finding of the research indicated that the validation obtained from media experts showed a value of 85.55% with a classification of very feasible to use. The acquisition of the educator efficiency test stated an average value of 92.033% with a classification of very efficient in order to cover three aspects of assessment, namely the aspect of assessing media characteristics and the aspect of assessing benefits. In addition, this was reinforced by other researchers who conducted research to describe the production of teaching materials utilizing *google sites* in elementary school science learning (Salsabila & Aslam, 2022) obtained results with two validators, namely the media expert validator showed an average percentage value of 81% interpreted into a feasible classification, and the material expert validator stated an average percentage value of 79% with a classification of very feasible. Student responses to the media obtained results of 92% with a classification of very feasible. Educator responses to learning media obtained a percentage value of 96% with a category of very feasible.

According to the summary given above, it was found that this study created a learning media based on *google sites* that can be used as a teaching tool. By using learning media based on *google sites* as a learning aid that can inspire learning so that students can improve the learning process to be more effective and meaningful. This media is a tool, method, and technique used to improve the effectiveness of communication and interaction between educators and learners during the educational process (Yuniarti et al., 2023).

This study still has limitations and needs improvement where this study only uses 3 stages of the ADDIE model due to time constraints. Suggestions for further research, namely the need for research improvement by implementing the 5 stages of the ADDIE model so that large-scale trials, educators can create learning tools developed using *google sites* in other subjects, and further research is needed on learning content developed using *google sites* in which are used primarily for teaching.

CONCLUSIONS AND RECOMMENDATION

Google sites -based learning media obtained an excellent evaluation based on the overall score given by the specialists. It can be inferred that the developed *Google sites* -based learning media is suitable for use in implementing the learning process. This *Google sites* -based learning media built on this platform can facilitate teachers in delivering information to students and enhance student engagement during both face to face and virtual learning sessions. In addition, *Google sites* -based learning media on the I am a student of Pancasila material also builds students' positive attitudes towards the media used. Learning resources developed through *google sites* can make students enthusiastic about education.

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