

Development of Interactive Articulate Storyline Media to Enhance Learning Interest in Pancasila Education for Fourth-Grade Elementary Students

Junita Dewi Afiyah¹, Susilo Tri Widodo²

¹ Universitas Negeri Semarang, Semarang, Indonesia ; junitaafdewi@students.unnes.ac.id

² Universitas Negeri Semarang, Semarang, Indonesia ; susilotriwidodo@mail.unnes.ac.id

ARTICLE INFO

Keywords:

learning media;
articulate storyline;
learning interest;
Pancasila education

Article history:

Received 2025-02-04

Revised 2025-08-30

Accepted 2025-09-30

ABSTRACT

Interest in learning Pancasila Education is essential for developing 21st-century competencies such as character and citizenship. However, low student engagement in this subject remains a challenge. Learning media can play a critical role in increasing interest and motivation. This study aimed to develop and evaluate an interactive learning medium using *Articulate Storyline* to enhance fourth-grade students' interest in Pancasila Education. The research employed a Research and Development (R&D) approach using the ADDIE model (Analyze, Design, Develop, Implement, Evaluate). Participants included fourth-grade students and teachers from the Ki Hajar Dewantara Elementary School cluster in Semarang, Indonesia. Data collection involved expert validation, student and teacher responses, and pre- and post-tests using learning interest indicators. Statistical analysis included normality, homogeneity, t-tests, and N-Gain tests. The media received a 92% feasibility score from both media and material experts, categorized as "very feasible." Student and teacher responses were also positive, with scores of 87% and 86%, respectively. The t-test yielded a significance value of 0.000, indicating a significant difference in learning interest before and after media use. The N-Gain score was 0.605 (60.5%), categorized as "moderately effective." These results confirm the media's effectiveness in increasing students' interest in Pancasila Education by providing interactive, engaging, and accessible content tailored to student characteristics. The *Articulate Storyline*-based media is feasible and moderately effective for enhancing fourth-grade students' learning interest in Pancasila Education and is recommended for broader classroom implementation.

This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



Corresponding Author:

Junita Dewi Afiyah

Universitas Negeri Semarang, Semarang, Indonesia; junitaafdewi@students.unnes.ac.id

1. INTRODUCTION

Education plays a crucial role in preparing students to adapt to the ever-changing global landscape by developing their potential and skills. One key approach to achieving this is through enhancing the quality of education, particularly by embedding 21st-century skills into the learning process. These skills have become increasingly vital for addressing the challenges posed by globalization (Khairunisa & Damayanti, 2023). Known as the "6C": character, critical thinking, creativity, collaboration, and communication (Miterianifa et al., 2021), these skills are essential for students to thrive in today's world. According to Minister of Education, Culture, Research, and Technology Regulation No. 5 of 2022, which outlines the graduate competency standards for early childhood, elementary, and secondary education, the development of character based on Pancasila values is a key focus for elementary school students. The 2013 curriculum has aimed to instill character values and civic awareness through Pancasila and civic education. However, the Merdeka curriculum has redefined the approach to Pancasila education. Ministerial Regulation No. 12 of 2024 further emphasizes that Pancasila education is now a compulsory subject at the elementary and secondary levels of education.

Despite these regulations, the implementation of Pancasila education faces significant challenges, as evidenced by the research of Aisah et al., (2022), which highlights learning difficulties among students. These challenges include struggles to grasp the material and the teacher's explanations. Hatami (2020) further reinforces these findings, noting that Pancasila education is often perceived as dull and filled with unengaging content. Moreover, Ramadhan et al., (2023) point out that teaching materials, often limited to text and static images, fail to stimulate student interest and hinder comprehension. Similarly, Pramugita et al., (2023) reveal that students tend to experience boredom with Pancasila education, mainly because the learning process focuses solely on textbooks, and teachers have not incorporated technology into their lessons. Indira et al., (2023) also observe that the learning environment is often not conducive to active participation, resulting in a lack of engagement from students during Pancasila education.

The research is in line with the observation and interviews that were done by the researcher in 3 different schools at the Ki Hajar Dewantara Group in Mijen District, Semarang City which are Ngadirgo 01, Ngadirgo 02, and Ngadirgo 03 State Elementary School obtained that the students in higher grade have a relatively low interest in learning Pancasila education because students are still experiencing learning difficulties. The homeroom teacher said that the students find it difficult to learn Pancasila education because of the wide coverage of material, learning that involves a lot of text, and hard to differentiate the examples of Pancasila values. Other than that, the teachers also find it difficult to improvise learning in the classroom because Pancasila education only tends to civics knowledge aspects. The learning process condition is also less active, where from 26-30 students in class there are only 2-3 students who actively ask and answer questions from the teachers. Students are often shy and do not participate in discussions to deliver their opinions or explain discussion result in front of the class and are bored in the learning process.

The constraints in Pancasila education lessons are reinforced by the success of Pancasila Education in Elementary Schools which still needs to be improved because the percentage of character indicators is lower and has not experienced a significant increase compared to literacy and numeracy indicators. Pancasila education has an important role in developing 21st-century skills, one of which is character. The education report results at Ngadirgo 01, Ngadirgo 02, and Ngadirgo 03 State Elementary School that show 50%-75% percentage on character indicator, while literacy indicator shows 90%-100% percentage and numeration indicator shows 70%-100% percentage. Therefore, it is crucial to make an effort to enhance the success rate of Pancasila education because the character indicator is lower than the literacy and numeration indicator and has not significantly improved. The education report percentage in Indonesia and education report at Ngadirgo 01, Ngadirgo 02, and Ngadirgo 03 State Elementary School in 2023 and 2024 on character, literacy, and numeration indicators are as follows:

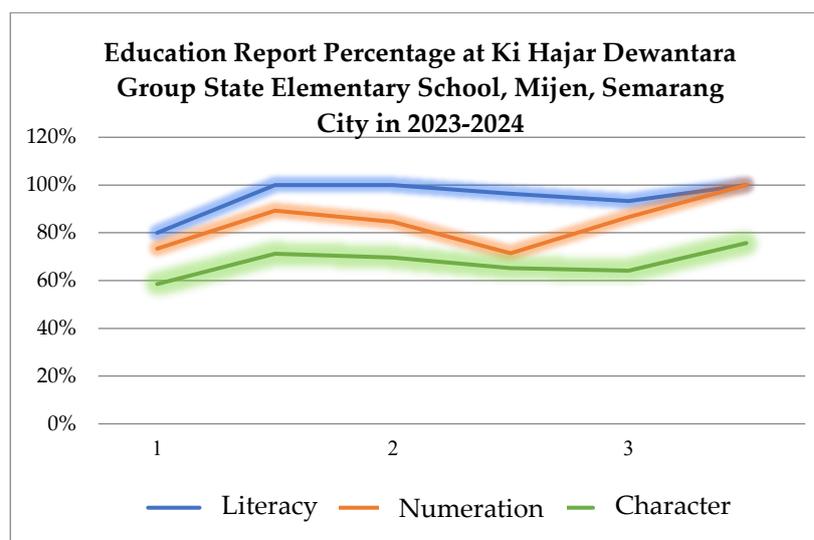


Figure 1. Education Report Percentage at Ki Hajar Dewantara Group State Elementary School

To address the challenge of supporting students in understanding complex material and enhancing their interest in learning, the use of learning media is essential. Learning media serves as a bridge for communication between teachers and students during the educational process (Suseno, Ismail, & Ismail, 2020). According to Hadad et al., (2023), learning media not only stimulates students' interest and enthusiasm but also aids in improving their comprehension. Based on this, the researcher proposes the development of Articulate Storyline learning media to enhance student interest in education, specifically for the 4th-grade Pancasila education at Ki Hajar Dewantara Group State Elementary School.

The Articulate Storyline media developed by researchers has more complete components and features such as songs containing material to make it easier to understand learning, quiz review features that can make it easier for students to know the right and wrong answers, easy access with buttons designed according to student characteristics and games for students that can be used as a means of ice breaking. The media functions to attract attention and create fun learning so that students are enthusiastic and active in participating in Pancasila education learning.

Multiple studies have shown that learning media can effectively enhance students' interest in learning. For instance, Jenahut & Lake (2023) found that Articulate Storyline-based learning media, which incorporates local wisdom values, proved to be an effective and valuable tool for supporting learning. Similarly, Majid & Kawuryana (2023) found that Articulate Storyline learning media enhance both learning interest and student engagement in the learning process. The research conducted by Adhiana et al., (2022) also revealed that Articulate Storyline-based game-oriented learning media, especially for mathematical fraction concepts, is effective in improving student outcomes. Additionally, Sunaryati, Sudharsono, & Misbah (2023) confirmed that Articulate Storyline media could support Pancasila and Civics education, enhancing student interest. Firdausa & Wicaksono (2023) found that interactive media developed through Articulate Storyline 3 facilitates understanding, enhance student interest, and motivates students to engage with the material. This is further supported by Rianto (2020), who highlighted that Articulate Storyline's features allow for the creation of interactive slides that can engage students and provide simulations to enhance comprehension. The research by Sari & Harjono (2021) echoed these findings, stating that Articulate Storyline-based media supports 4th-grade teachers in delivering content, helps students understand the material, and fosters interest and motivation. Nurmala, Triwoelandari, & Fahri (2021) also noted that Articulate Storyline's user-friendly features make learning media more engaging and accessible.

Some of the research on Articulate Storyline media is focused on improving learning outcomes, learning motivation, and convenience in the learning process at school. However, there is no research

focused on enhance fourth grade students' interest in Pancasila education with material on the meaning of Pancasila values which is complemented by material on the history of the formulation of Pancasila, that in previous studies there were limited media components and media designs that were still simple so that they would be refined by researchers in this study. Therefore, this study aims to develop Articulate Storyline media to increase the interest of fourth grade elementary students in Pancasila education.

2. METHODS

This study employs the Research and Development (R&D) methodology, using the ADDIE model as the framework for developing the Articulate Storyline product to enhance students' interest in learning Pancasila education, particularly the values of Pancasila. The R&D approach is designed to create a product and assess its effectiveness. The ADDIE model includes five phases: analysis, design, development, implementation, and evaluation (Sugiyono, 2021). These steps provide a structured approach to plan, design, develop, and evaluate the effectiveness of the educational product. These steps provide a structured approach to plan, design, develop, and evaluate the effectiveness of the educational product. This research uses 1 independent variable and 1 dependent variable. The Independent variable in this research is Articulate Storyline learning media with problem-based learning on the Pancasila values material for 4th-grade students in Ki Hajar Dewantara Group State Elementary Schools, Semarang. The dependent variable used in this research is the students' learning interest.

The first phase, analysis, begins with identifying the real-world problems affecting students' engagement in Pancasila education. This involves conducting interviews, observations, and document reviews to uncover the issues impacting student interest in learning Pancasila. Additionally, materials that significantly influence students' engagement are selected. To gather more data, the researcher distributes questionnaires to both teachers and students, with the responses guiding the development of Articulate Storyline media focused on the meaning of Pancasila values. The second phase is product design. Here, the researcher creates the layout and storyboard for the Articulate Storyline media. The layout includes visual elements such as menus and component arrangements, while the storyboard outlines the media's design, which is organized using Microsoft Word.

In the third phase, development, the researcher uses Canva to design elements of the learning media, adhering to the layout and storyboard. This step involves inserting the relevant materials, videos, and images into the media components. The learning media is then compiled using Articulate Storyline software. The end product is an application and website that can be accessed during the learning process. After the development is complete, the researcher conducts an eligibility assessment with media and material expert validators to ensure the media's quality and gather suggestions for improvement before the final implementation.

The fourth phase, application, involves trial testing the product (Sugiyono, 2021). This testing process includes both small-scale and large-scale trials. In the small-scale trial, questionnaires are distributed to gather feedback from both students and teachers on the product's effectiveness. For the large-scale trial, two groups of students are involved: 26 students from the control group (without the application) and 26 students from the experimental group (with the application). This phase includes both pre-tests and post-tests, based on indicators from Rahmawati, (2024), to evaluate the students' learning interest in Pancasila education. The comparison is made between the learning interest of students using Articulate Storyline media and those using traditional PowerPoint media.

The last step of this research is evaluation, which was done by judging whether each step of the activity and created product, which is Articulate Storyline, follows the specification (Sugiyono, 2021). The researcher did pre-test and post-test questionnaire analysis from the control class students and experiment class students to know the effectiveness of media utilization on learning interest in Pancasila education materials regarding Pancasila values.

The location of this research is 3 different elementary schools in Ki Hajar Dewantara Group, Mijen District, Semarang City. They are Ngadirgo 01, Ngadirgo 02, and Ngadirgo 03 State Elementary School. The subject of this research contains 15 students on a small-scale trial and 52 students on a big-scale trial divided into two classes, a control class and an experiment class. The research subjects were limited to two schools because the number of schools in one cluster in Semarang City is very wide and the time constraints of the researchers so that the researchers only sampled from 2 classes and 2 different schools. The sample determination was carried out using probability sampling techniques, specifically cluster random sampling developed by Sugiyono (2021). Probability sampling is a sampling technique that provides equal opportunities for each element (member) of the population to be selected as a sample member. The probability sampling technique with the cluster random sampling specification was chosen because this technique can be used to determine the sample when the object to be studied or the data source is too broad, has homogeneous elements/members, and is both in one area, namely the Ki Hajar Dewantara cluster elementary school. Therefore, the sampling based on the population area has been set. Ngadirgo 01 State Elementary School as the control class did not use Articulate Storyline learning media, but only used PowerPoint slides, while Ngadirgo 03 used Articulate Storyline learning media in their lesson. Then, the students were given the same pre-test and post-test questionnaires. The students' learning interest measured through the pre-test and post-test questionnaires of the students according to learning interest indicators adapted from Rahmawati (2024). The learning interest indicators are as follows:

Table 1. Learning Method Indicators

No	Indicator	Sub-Indicator
1.	Joyful Feeling	Feeling happy during the lesson
		Excited to follow the lesson
		Not feeling bored during the lesson
		Attend the lesson
2.	Attention	Satisfied with the scores
		Paying attention to the teacher during lesson
		Concentrated during the lesson
		Taking notes of important things during lesson
3.	Interested Feeling	Serious in doing tasks
		Discipline in doing tasks
		Feeling enthusiastic during lesson
4.	Student Involvement	Interest to learn deeper
		Active in group discussion
		Asking the teacher if there is a difficulty
		Discipline to attend the lesson

Data collecting techniques used in this research include observation, interview, questionnaire, and documentation. 1.) Observation, according to Sugiyono (2021) observation is a data-collecting technique that has a specific characteristic compared to other techniques. Observation in this research is by doing direct observation in the field to know the real conditions such as infrastructures, learning resources, learning methods, learning content, and students' behavior during the class. 2.) Interview, data collected through interviews was done with 3 4th-grade teachers from Ki Hajar Dewantara Group State Elementary Schools, Semarang City, based on the interview guide that had been arranged beforehand. The interview was done in the field to know the problems experienced by the students during the learning process. 3.) Questionnaire, the questionnaires used by the researcher are 6 in total, including media expert validation, material expert validation, students' response questionnaire, teachers' response questionnaire, pre-test questionnaire, and post-test questionnaire for the students on learning interest indicators. The questionnaires were developed with the Likert rule on a scale of 1

to 5 to know the responses of the respondents deeply. Pre-test and post-test questionnaires of the students were used by the researcher to measure the learning interest through validity and reliability tests by testing Cronbach Alpha validity and reliability with a valid result and reliability after testing on the questions at Ngadirgo 02 State Elementary School.

Table 2. Instrument Validity Result

No	Indicator	Sub-Indicator	Sig. (2-tailed)
1.	Joyful Feeling	Feeling happy during the lesson	0.028
		Excited to follow the lesson	0.001
		Not feeling bored during the lesson	0.003
		Attend the lesson	0.037
		Satisfied with the scores	0.001
2.	Attention	Paying attention to the teacher during lesson	0.000
		Concentrated during the lesson	0.000
		Taking notes of important things during lesson	0.000
		Serious in doing tasks	0.000
3.	Interested Feeling	Discipline in doing tasks	0.003
		Feeling enthusiastic during lesson	0.043
		Interest to learn deeper	0.001
4.	Student Involvement	Active in group discussion	0.000
		Asking the teacher if there is a difficulty	0.001
		Discipline to attend the lesson	0.004

The significance value of the 15 items is below 0.05, this shows that the questionnaire question items are valid and have benefits as research measuring instruments. Furthermore, there are the results of the questionnaire reliability test.

Table 3. Instrument Reliability Test Result

Reliability Statistics	
Cronbach's Alpha	N of Items
0.886	15

The reliability of the instrument is above the 0.70 level, as shown in Cronbach's Alpha score of 886. Consequently, the question items can be trusted to measure student interest in learning. 4.) The last data analysis technique is documentation, documentation used in this research is school education reports.

The data analysis technique for this development research is the data analysis technique that is used to process the development result data is the quantitative descriptive analysis technique. Steps taken are to give scores to the media expert questionnaires the material expert questionnaires and also teacher's and student's response questionnaires based on the Likert scale then the total of the score is applied in the calculation to calculate the percentage by using the following formula:

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

Explanation:

P = Percentage

S = The total score of assessment result

N = The total of maximum score

(Arikunto, 2017)

The eligibility percentage is then converted into a sentence to know the eligibility of the product. The following percentage table explains the eligibility of media according to Arikunto (2018).

Table 4. The Criteria of Eligible Media

Percentage	Criteria
81% - 100 %	Very Eligible
61%-80%	Eligible
41%-60%	Less Eligible
21%-40%	Very Less Eligible
0%-20%	Not Eligible

The data analysis from the students' pre-test and post-test results on the learning interest steps includes scoring according to the Likert scale, then the total score is tested through a statistic test using SPSS. The statistic test consists normality test, homogeneity test, t-test, and N-Gain test. The normality test and homogeneity test are prerequisite tests to know whether the data distribution is normal and homogeneous. After knowing whether the data distribution is normally distributed or not and whether the variants are homogeneous or not, then the analysis step could be continued with the effectivity test that will be done through t-test and N-Gain test. T-test is used to know if there is a significant difference in learning interest before and after the utilization of Articulate Story learning media. The N-gain test is used to know the effectivity level of the media by testing the improvement of the students' pre-test and post-test results. The basis for making decisions regarding the N-Gain test are as follows:

Table 5. N-Gain Criteria

N-Gain Value	Criteria
$0,70 \leq g \leq 100$	High
$0,30 \leq g \leq 70$	Middle
$0,00 \leq g \leq 30$	Low
$g = 0,00$	No Enhance
$-1,00 \leq g \leq 0,00$	Decrease

Table 6. Category of N-Gain Interpretation (%)

Percentage %	Interpretation
<40	Not Effective
50 – 55	Less Effective
56 – 75	Effective Enough
>76	Effective

3. FINDINGS AND DISCUSSION

3.1 *The Result of the Development of Articulate Storyline Media to Improve Learning Interest in Pancasila Education Material Regarding Pancasila Values*

The outcome of this research is a product named Articulate Storyline media that contains Pancasila values materials in Pancasila education subject for 4th grade in Elementary School. The Articulate media is designed to look similar to a game in application and website form, so it could be operated from any gadget such as a phone, computer, or laptop.

The design of Articulate Storyline learning media is made interestingly and focused on the characteristics of elementary students in selecting pictures and language. The design of Articulate Storyline learning media has several parts: 1.) Login page, 2.) Menu page, 3.) Media developer profile page, 4.) Introduction page, 5.) Material page, 6.) Video, 7.) Quiz page, 8.) Game page. The components in every part of Articulate Storyline learning media are designed by focusing on several aspects, which are the ease of access, the conformity to the student, and the adequate of the materials. Materials

contained in the media are related to Pancasila values for the 4th grade presented systematically, solidly, and featured with historical material of the people who formulated Pancasila as a trigger material. The media design also contains a quiz with 10 evaluation questions that can be accessed directly on Articulate Storyline media and value acquisition can be seen after all of the questions have been answered. This media also adds matching pair games that could be used as ice-breaking media. The following is the picture of the Articulate Storyline media display:



Figure 2. Articulate Storyline Cover



Figure.3 Articulate Storyline Main Menu



Figure.4 Articulate Storyline Instructions

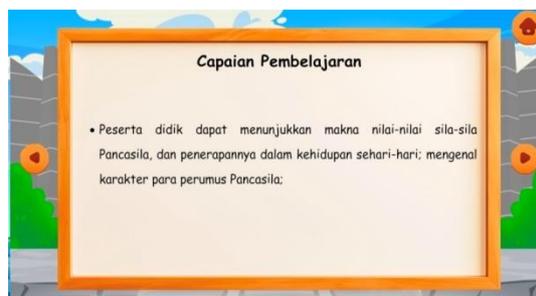


Figure.5 Learning Outcomes

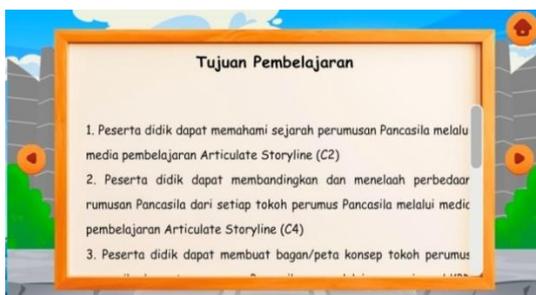


Figure.6 Learning Objectives



Figure.7 Materials on Articulate Storyline

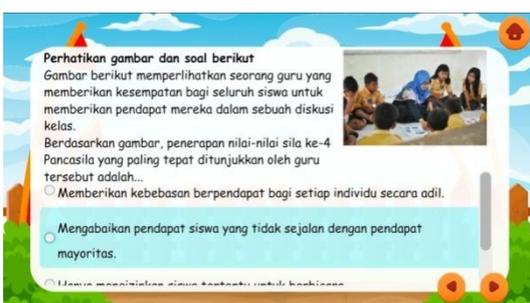


Figure.8 Quiz on Articulate Storyline



Figure.9 Material Video in Articulate Storyline



Figure.10 Games on Articulate Storyline



Figure.11 Articulate Storyline Media Developer Profile

The short presentation of the material helps students understand the material more easily. Images and music in the media make students interested in learning. Evaluation questions designed with easy access and a review feature to find out the correctness or wrong answers make students more enthusiastic about learning. The matching game feature designed according to student characteristics makes students enthusiastic in learning. This Articulate Storyline media is presented like a game so that students are not fixated on learning Pancasila education material but students seem to learn while playing using the media because when accessing the media is like accessing an online game. That way students are interested in learning and actively involved in learning.

3.2 The Result of Articulate Storyline Media Eligibility Test to Improve Learning Interest in Pancasila Education Materials Regarding Pancasila Values

The eligibility of Articulate Storyline media is obtained based on the assessment of the media expert validator, material expert, teachers' response, and students' response. The eligibility assessment was done to make sure the developed media is following the needs and characteristics of the students and contains relevant materials so it could overcome the problems experienced by the teachers in the learning process. The eligibility assessment indicators are adapted from Kustandi & Darmawan (2020) and Safitri et al., (2023).

A media expert assessment was done by one of the lecturers of Primary Teacher Education at the State University of Semarang. The assessment indicators contain five points: design, technical, learning environment, illustration, and typography.

Table 7. Result of Media Expert Assessment

No	Indicator	Given score	Maximum score
1.	Design	23	25
2.	Technical	19	20
3.	Learning environment	14	15
4.	Ilustration	13	15
5.	Typography	14	15
Total score		83	90
Score percentage		92%	
Criteria		Very eligible	

According to the validation assessment result by the media expert on the development of Articulate Storyline learning media in every indicator, obtained a 92% percentage. Therefore, it can be concluded that the Articulate Storyline learning media is very eligible without any revision from design, technical, learning environment, illustration, and typography indicators.

The eligibility test is also done by the material expert validator. The material expert in this research is one of the lecturers of Primary Teacher Education at the State University of Semarang. The assessment indicators are learning design, material content, language, and communication.

Table 8. Result of Material Expert Assessment

No	Indicator	Given score	Maximum score
1.	Learning Design	27	30
2.	Material Content	18	20
3.	Language and Communication	24	25
Total Score		69	75
Score Percentage		92%	
Criteria		Very Eligible	

Based on the validation assessment result by the material expert on the development of Articulate Storyline learning media in every indicator, obtained a 92% percentage. Therefore, it could be concluded that Articulate Storyline media is very eligible without any revision from learning design, material content, and language and communication. After obtaining an eligibility assessment from a media expert and material expert with very eligible criteria, the researcher then held a trial of media utilization. The product is tried through a small-scale trial first to know the responses of teachers and students on the utilization of Articulate Storyline learning media in Pancasila education materials regarding Pancasila values for 4th grade. According to Arikunto (2019), a small-scale trial could be held for 4-20 respondents. The researcher used 15 students from 4th grade as the trial sample and 2 teachers from 4th grade to use the media and fill the response questionnaire regarding Articulate Storyline media.

Response questionnaire indicators in media utilization include design, technical, learning environment, typography, learning design, material content, and language and communication. Articulate Storyline media obtained 87% percent of the students responses with very eligible criteria. The students responded to the Articulate Storyline media through the questionnaire comment column and argued that the articulate storyline media was easy to use, and interesting because it was like playing a game, and they could understand complex material easily so they did not feel bored following the lesson. In addition, students feel that learning is more exciting and fun because they can use computers and not just read text in books. Furthermore, the teacher's response to the use of Articulate Storyline media for Pancasila values material obtained a percentage of 86% with very feasible criteria. Through the suggestions and input column in the teacher response questionnaire, it is stated that students become more excited and interested when using the media, besides that students also become more enthusiastic and active during the learning process using the media and even students are competing to complete quizzes and projects. Therefore, it can be concluded that the articulate storyline media does not need to be revised and can be continued to the next stage of research.

The next step is a big-scale product trial that is done by involving 2 groups, the control class and the experiment class. The researcher used quasi-experimental on the big-scale trial. The quasi-experimental design was done by involving 2 schools, 26 students from Ngadirgo 01 State Elementary School and 26 students from Ngadirgo 03 State Elementary School, where Ngadirgo 01 took the role of control class and Ngadirgo 03 took the role of experimental class. The final step is doing an effectivity analysis of Articulate Storyline learning media utilization by comparing the pre-test and post-test from both groups, the control class and the experiment class to know whether there is a significant difference in learning interest before and after using PowerPoint slides or Articulate Storyline learning media and test the effectivity level of the media through statistic test with SPSS program.

The results of research from material experts, media experts, teacher and student responses in using Articulate Storyline learning media show that the media developed has met the criteria for

selecting media so that it is feasible to apply. This is in accordance with the statement of Kustandi & Sucipto in Zahwa (2022) there are several factors in choosing the learning media to be used including funds or materials, learning materials, students and types of media. Articulate Storyline media is in accordance with the characteristics of students, contains material that is in accordance with learning objectives and is easy to use because it is practical and can be accessed through electronic devices. Thus it can be concluded that Articulate Storyline media is very feasible to use.

3.3 The Effectivity of Articulate Storyline Media to Improve Learning Interest in Pancasila Education Material Regarding Pancasila Values

The effectiveness of Articulate Storyline media was determined by analyzing the pre-test and post-test questionnaire results, which assessed students' interest in learning Pancasila education materials, specifically related to Pancasila values. The comparison was made between the control and experimental groups. The control group used PowerPoint slides, while the experimental group used Articulate Storyline media during lessons. The pre-test results revealed an average score of 57.69 for the control group and 56.20 for the experimental group. In contrast, the post-test scores showed an average of 59.27 for the control group and 67.31 for the experimental group. These results indicate that the post-test score of the experimental group, which used Articulate Storyline, was higher than that of the control group.

Table 9. Recapitulation of Pre-test and Post-test Results in the Control Class and Experimental Class

Data	Class	Total Students	The Lowest Score	The Highest Score	Average Score
Pre-test	Control Class	26	41	73	57.96
	Experiment Class	26	46	75	56.20
Post-test	Control Class	26	42	72	59.27
	Experiment Class	26	60	75	67.31

The students' pre-test and post-test results are analyzed with a statistical test using SPSS. The early step is to do the prerequisite test, which is normality test and homogeneity test. The first prerequisite test is the normality test which aims to know whether the data is distributed normally.

Table 10. Normality Test Result

Normality Test						
Shapiro-Wilk						
Data	Class	Statistic	df	Sig.	Condition	Description
Pre-test	Control Class	.983	26	.928	Sig. > 0.05	Normal
	Experiment Class	.959	26	.370		
Post-test	Control Class	.976	26	.775	Sig. > 0.05	Normal
	Experiment Class	.944	26	.167		

Based on the table above, it could be known that the pre-test and post-test values of the students in the control class and experiment class have more than 0.05 significance value. The pre-test significance value of the control class is 0.928 and the pre-test in the experiment class is 0.370, while the post-test in the control class is 0.775 and the post-test in the experiment class is 0.167. Therefore, it could be concluded that the data was distributed normally. The next prerequisite test is the homogeneity test which aims to know whether the data is homogeneous.

Table 11. Homogeneity Test Result

Homogeneity Test				
Data	Class	Sig.	Condition	Description
Pre-test	Control Class	.371	Sig. > 0.05	Homogeneous
	Experiment Class			
Post-test	Control Class	.118	Sig. > 0.05	Homogeneous
	Experiment Class			

From the analysis, it can be concluded that the significance values of the students' pre-test and post-test results in both the control and experimental classes are greater than 0.05. Specifically, the significance value of the pre-test for both groups is 0.371, while the post-test significance level is 0.118. These values indicate that the data is homogeneous.

Following the prerequisite tests, the researcher conducted a t-test to assess the differences between the pre-test and post-test results for both the control and experimental classes. The t-test analysis was performed to determine whether the research hypothesis could be accepted. This analysis aims to evaluate the effectiveness of Articulate Storyline media in enhancing students' interest in learning the meaning of Pancasila values. The hypotheses proposed in this study are as follows:

H_0 = There is no significant difference of the students' learning interest in Pancasila Education

H_a = There is a significant difference of the students' learning interest in Pancasila Education

Table 12. T-test in Control Class and Experiment Class Result

T-Tests				
Data	Class	Sig.	Condition	Description
Pre-test	Control Class	.539	Sig. > 0.05	H_0 Accepted
	Experiment Class			
Post-test	Control Class	.000	Sig. < 0.05	H_0 Rejected
	Experiment Class			

The t-test results indicate that the significance value for the pre-test in both the control and experimental classes is greater than 0.05, meaning that the null hypothesis (H_0) is accepted. This suggests there is no significant difference in students' learning interest before the media was introduced in either group. However, the significance value for the post-test in both classes is less than 0.05, leading to the rejection of the null hypothesis (H_0), which implies a significant difference after the use of the media. As a result, it can be concluded that Articulate Storyline media is effective in enhancing students' learning interest in Pancasila education, as evidenced by the significant improvement in the post-test scores of the experimental group. To further assess the effectiveness, the researcher also performed an N-Gain test to evaluate the level of improvement in students' learning interest after using Articulate Storyline media.

Table 13. N-Gain Test in Control Class and Experimental Class Result

Class	Data	N-gain (Score)	Criteria	N-Gain (%)	Interpretation
Control Class	Pre-test	0.1098	Low	10.98%	Not Effective
	Post-test				
Experiment Class	Pre-test	0.6049	Middle	60.49%	Effective
	Post-test				

The minimum percentage of N-Gain test results is 56% with fairly feasible criteria, if the N-Gain test results are below 56% then the media is less effective in use and cannot be implemented in learning.

The N-Gain calculation results indicate that the control class, which used PowerPoint media, achieved an N-Gain score of 0.1098, categorized as low, with a 10.98% improvement percentage, falling into the "not effective" category. In contrast, the experimental class, which used Articulate Storyline media, obtained an N-Gain score of 0.6049, placed in the middle criteria, with a 60.49% improvement percentage, indicating that the media was "effectively enough." This demonstrates that Articulate Storyline media is effective in enhancing students' learning interest in Pancasila education. These results are in line with the behavioristic theory developed by Skinner that changes in human behavior are a response to a stimulus that is carried out continuously, this means that changes in student interest in learning are a response to the provision of stimulus in the form of Articulate Storyline media which is given continuously in the learning process. Therefore, based on the results of the product trial, it can be concluded that the Articulate Storyline media developed by the researcher is effective and suitable for improving the learning interest of 4th-grade students in Pancasila education at Ki Hajar Dewantara Group State Elementary School.

These findings are consistent with previous research, such as Mufidah & Khori's study (2021) on the development of Articulate Storyline learning media to improve student learning outcomes, which concluded that Articulate Storyline media met the criteria for being highly valid and effective. Similarly, Fitriani et al., (2022) found that Articulate Storyline media in science education was feasible and effective for enhancing science literacy. Additionally, Juhaeni et al., (2021) confirmed that interactive multimedia based on Articulate Storyline is well-suited for use in Pancasila education.

The development of this learning media is focused on enhancing the learning interest of grade 4 students towards Pancasila education where there are differences in the development of this media against previous research such as differences in material and media content. The media in this study contains material on the meaning of Pancasila values, media accompanied by games and quizzes as well as music and videos that can help students learn more easily and enhance their enthusiasm for participating in learning. In the implementation of this learning media, there are several obstacles such as the limited number of devices available at school, and the duration of implementation is also still limited to one week only. In addition, sometimes students access content outside of learning when opening media through the website, so the use of this media in learning is better to use laptop/computer devices instead of personal cell phones so that students do not access other content outside of learning.

Besides these obstacles, with the presence of this learning media, students can practice operating digital technology which can provide benefits if used wisely. Through the use of this media, students can also improve their ability to operate computers where this ability serves to facilitate students when working on computer-based National Assessment questions so that students are familiar with the parts that are in digital technology such as computers/laptops.

4. CONCLUSION

The study concludes that the use of Articulate Storyline media significantly enhances students' interest in learning, as evidenced by a post-test t-test significance value of 0.000 and an N-Gain score of 0.60 (60.49%), indicating a moderate and fairly effective improvement. The media's interactive features, accessibility, and alignment with student characteristics contributed to increased engagement and a deeper understanding of Pancasila values. These results align with prior research affirming the effectiveness of Articulate Storyline in facilitating meaningful and enjoyable learning experiences. However, the study is limited by the availability of digital devices, the narrow range of material covered, and the restricted scope of the trial, which was confined to primary schools within the Gugus Ki Hajar Dewantara cluster. Future research should broaden the range of subjects, involve more diverse educational settings, and explore long-term impacts. It is recommended that educators integrate Articulate Storyline into the learning process to foster greater interactivity and mitigate student boredom through varied media use.

REFERENCES

- Adhiana, V. I., Yuniawatika, Y., Ahdhianto, E., & Wantoro, J. (2022). Interactive Media Development Using Articulate Storyline-Based Instructional Games for Teaching Fractions. *Profesi Pendidikan Dasar*, 9(1), 15–27.
- Aisah, R. N., Masfuah, S., & Rondli, W. S. (2022). Analisis Faktor Penyebab Kesulitan Belajar PPKn di SD. *Jurnal Ilmiah PGSD STKIP Subang*, 8, 671–685.
- Arikunto, S. (2017). *Pengembangan Instrumen Penelitian dan Penilaian Program*. Yogyakarta: Pustaka Pelajar.
- Arikunto, S. (2018). *Dasar Dasar Evaluasi Pendidikan*. Jakarta: PT Bumi Aksara.
- Arikunto, S. (2019). *Prosedur Penelitian*. Jakarta: Rineka Cipta.
- Firdausa, S., & Wicaksono, V. D. (2023). Pengembangan Media Interaktif “ Gasiba ” Menggunakan Articulate Storyline 3 Muatan Pendidikan Pancasila Pada Materi Keragaman Sosial Budaya Di Indonesia Kelas V Sekolah Dasar. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar (JPGSD)*, 11(10), 2152–2161.
- Fitriani, D. K., Supeno, S., Wahyuni, D., & Rahayuningsih, R. (2022). Pengembangan Media Interaktif Berbasis Articulate Storyline Pada Pembelajaran Ipa Materi Sistem Tata Surya Untuk Meningkatkan Literasi Sains. *Jurnal Eduscience*, 9(2), 294–304.
- Hadad, M. K., Kartinah, K., Pramasdyahsari, A. S. (2023). Pengembangan Media Hampers Asean pada Mata Pelajaran IPS Siswa Kelas 6 SD Supriyadi Semarang. *Jurnal Pendidikan Tambusai*, 7, 4390–4396.
- Hatami, W. (2020). Anime Doraemon Sebagai Sumber Pembelajaran PKn. *Edueksos : Jurnal Pendidikan Sosial & Ekonomi*, 9(2).
- Indira, A., Saputri, D., Wahyu, E., Pangestu, P., Widodo, S. T., Wahyuni, I., & Andayani, T. W. (2023). Penerapan Media Inovatif Berbasis Problem Based Learning sebagai Upaya Mengatasi Kesulitan Belajar Peserta Didik pada Pembelajaran Pendidikan Pancasila di Sekolah Dasar. *Jurnal Basicedu*, 7(6), 3548–3558.
- Jenahut, K. S., & Lake, A. C. O. R. (2023). Articulate Storyline-Based Learning Media Loaded with Local Wisdom Values in Historical Narrative Text Material for Elementary School Students. *Jurnal Ilmiah Sekolah Dasar*, 7(3), 566–578.
- Juhaeni, J., Saffarudin, S., & Salsabila, Z. (2021). Articulate Storyline Sebagai Media Pembelajaran Interaktif Untuk Peserta didik Madrasah Ibtidaiyah. *AULADUNA: Jurnal Pendidikan Dasar Islam*, 8 (2), 150.
- Khairunisa, W., & Damayanti, S. (2023). Pentingnya Pendidikan Kewarganegaraan bagi Suatu Negara pada Generasi Milenial Abad-21. *Ideas: Jurnal Pendidikan, Sosial, Dan Budaya*, 9(1), 35.
- Kustandi, C., & Darmawan, D. (2020). *Pengembangan Media Pembelajaran*. Jakarta: Kencana.
- Majid, A. F., & Kawuryana, S. P. (2023). Articulate Storyline 3 Interactive Media to Increase Learning Interest and Activeness of Fifth Grade Elementary School Students. *Jurnal Ilmiah Sekolah Dasar*, 7(4), 740–751.
- Miterianifa, M., Ashadi, A., Saputro, S., & Suciati, S. (2021). Higher Order Thinking Skills in the 21st Century: Critical Thinking. *EAI Research Meets Innovation*.
- Mufidah, E., & Khori, N. (2021). Pengembangan Media Pembelajaran Articulate Storyline untuk Meningkatkan Hasil Belajar Siswa Sekolah Dasar di Masa Pandemi Covid 19. *Ibtida' Media Komunikasi Hasil Penelitian Pendidikan Guru Madrasah Ibtidaiyah*, 2(2), 124–132.
- Nurmala, S., Triwoelandari, R., & Fahri, M. (2021). Pengembangan Media Articulate Storyline 3 pada Pembelajaran IPA Berbasis STEM untuk Mengembangkan Kreativitas Siswa SD/MI. *Jurnal Basicedu*, 5(6), 5024–5034.
- Pramugita, C., Listyaningrum, B. D., Kusuma, R. O., & Indah, N. (2023). 2023 Madani : Jurnal Ilmiah Multidisiplin Penggunaan Media Interaktif Youtube dan Quizizz Paper Mode Terhadap Minat Belajar Siswa Kelas IV SDN Lemahireng 05 Dalam Pembelajaran Pendidikan Pancasila 2023 Madani : Jurnal Ilmiah Multidisiplin. *Madani: Jurnal Ilmiah Multidisiplin*, 1(11), 245–254.

- Rahmawati, R. K. N. (2024). *Minat Belajar (Konsep Dasar, Indikator & Faktor-Faktor yang Memengaruhi)*. Malang: CV. Literasi Nusantara Abadi.
- Ramadhan, W., Meisya, R., Jannah, R., & Zarkasi, K. (2023). E-modul Pendidikan Pancasila Berbasis Canva Berbantuan Flip PDF Profesional untuk Meningkatkan Hasil Belajar Siswa Sekolah Dasar. *JP2SD (Jurnal Pemikiran Dan Pengembangan Sekolah Dasar)*, 11(2), 178–195.
- Rianto, R. (2020). Pembelajaran Interaktif Berbasis Articulate Storyline 3. *Indonesian Language Education and Literature*, 6(1), 84.
- Safitri, M., Sarman, F., Rosadi, A., Hidayah, N., Kalifah, D. R. N., Dailami, Atikah, C. (2023). *Pengembangan Media pembelajaran*. Sumatra Utara: PT Mifadi Mandiri Digital.
- Sari, R. K., & Harjono, N. (2021). Pengembangan Media Pembelajaran Interaktif Berbasis Articulate Storyline Tematik Terhadap Minat Belajar Siswa Kelas 4 SD. *Jurnal Pedagogi Dan Pembelajaran*, 4(1), 122.
- Sugiyono. (2021). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: CV Alfabeta.
- Sunaryati, T., Sudharsono, M., & Misbah. (2023). Pengembangan Media Pembelajaran Articulate Storyline pada Pembelajaran Pendidikan Pancasila dan Kewarganegaraan untuk Meningkatkan Minat Belajar di Sekolah Dasar. *Attadib: Journal of Elementary Education*, 7(3).
- Suseno, P. U., Ismail, Y., & Ismail, S. (2020). Pengembangan Media Pembelajaran Matematika Video Interaktif berbasis Multimedia. *Jambura Journal of Mathematics Education*, 1(2), 59–74.
- Zahwa, F. A. (2022). Pemilihan Pengembangan Media Pembelajaran. *Equilibrium: Jurnal Penelitian Pendidikan Dan Ekonomi*, 19(01), 61–78.