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Development of *Inquiry-Based* Interactive Multimedia to Improve Student Learning Outcomes of Pancasila Education Lessons

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Abstract: In the learning process in the classroom, the conventional learning model is still used, where the teacher only plays the role of conveying information, while the students are passive listeners. This study aims to produce inquiry-based interactive multimedia that has been tested for media feasibility and has been proven effective in improving cognitive, affective, and psychomotor learning outcomes in fifth-grade students of Pancasila education at SDN 056425 Damar Seratus. The type of research used is Research and Development (R&D), commonly referred to as research and development. The development design in this study uses the Analysis Design Development Implementation Evaluation (ADDIE) model. The subjects of the research are fifth-grade students of SDN 056425 Damar Seratus. The results of the validation by media experts, design experts, material experts, education practitioners, and the results of field trials (individuals and small groups) indicate that the developed media products are suitable for use and categorised as very good. The Inquiry-Based Interactive Multimedia product in the form of Articulate Storyline 3 developed is also effective for use. The effectiveness of the developed media products is evidenced by the N-Gain test, which yielded a result of 0.6, and the hypothesis test, which yielded t-count = 8.286 and t-table = 1.705, thus t-count > t-table, leading to the acceptance of H_a and rejection of H₀. In addition to being effective in improving cognitive learning outcomes in students, this inquiry-based interactive multimedia in the form of articulate storyline 3 is also effective in changing affective and psychomotor aspects in students. In the affective aspect, an average score of 44.9 was obtained with an average score percentage of 89.9%, this proves that the affective aspect of students has changed significantly with the very good category. In the psychomotor aspect, the results were obtained with an average score of 37.7 with an average score percentage of 75.4%, this proves that the psychomotor aspect students has changed significantly with the good category.

Keywords: Development, Interactive Multimedia, Inquiry, and Learning Outcomes

INTRODUCTION

Education is a conscious and planned effort to create an environment where people learn, how they learn, and how they achieve. The national education system consists of educational components that are interrelated and integrated to achieve national education goals (Yunita et al., 2022). According to the Father of Indonesian National Education Ki Hajar Dewantara, education is a demand in the growth of children, which guides all natural forces in children so that they as humans and members of society can achieve the highest safety and happiness. Humanising humans is a humane process (Pristiwanti et al., 2022).

At this time education in Indonesia has developed according to the needs of the times. According to Nurul Huda's research in his writing entitled "Curriculum Development Management" which states that the rapid development of science and technology requires changes in the education curriculum to be relevant to the needs of the times (Nurul, 2017). This makes teachers and students experience difficulties because they have to re-adapt to the latest curriculum, namely the independent learning curriculum. The Merdeka Curriculum replaces K-13 with varied learning that adapts to student needs. Theme-based projects support the Pancasila learner profile without being tied to specific subjects (Mubarak, 2022). As for one of the subjects contained in the independent learning curriculum, namely the Civics subject which was developed in the independent curriculum into Pancasila Education. The Merdeka Belajar Movement emphasises Pancasila education to form the profile of Pancasila students who are faithful, independent, critical, and creative. Pancasila serves as a unifier of diversity and a guide in the development of the nation from generation to generation (Indra, Azis, & Dewi. 2023).

In learning Pancasila Education, it is more about learning by providing more concrete experiences so that it is easy for students to apply in everyday life, but there are limited resources. Not all schools have adequate resources to support Pancasila Education learning to be more concrete. For example, the lack of use of learning media as well as learning models that adequate in the learning process. This can affect students' ability understand and appreciate the values of Pancasila and cause student learning outcomes in Pancasila education to be low. The use of learning media plays an important role in improving student learning outcomes. However, according to Astuti, the integration of technology in learning media is still not optimal, so learning tends to be monotonous by relying only on textbooks. As a result, students are less interested, reluctant to participate in discussions, and tend to be passive for fear of being wrong. This condition causes low student learning outcomes, especially in Civics content (Astuti et al., 2023).

The use of interactive multimedia in learning Pancasila Education is an important solution to improve learning effectiveness. This technology-based media is able to present material in an interesting way by combining visual, audio and interactivity elements, thus increasing students' interest in learning. In , interactive multimedia also encourages students to be more active, critical and creative in understanding and internalising the values of Pancasila. The research "A New Paradigm of Civics Learning in Elementary Schools in Shaping Student Character in the Era of the Industrial Revolution 4.0" shows that the integration of technology in Civics learning, such as project-based learning, the use of interactive digital media, and internet-based educational applications, has proven effective in increasing student engagement and instilling civic values and digital ethics (Armianti et al., 2024). Research titled "*Integration of Digital Technology in Pancasila Education Learning for Strengthening the Profile of Pancasila Students*" shows that the utilisation of digital technology has a positive impact in shaping student character. This technology increases students' active involvement in discussions and activities based on Pancasila values, thus strengthening their independent character, critical reasoning, and noble character. Thus, students not only understand the theory, but are also able to apply the values of Pancasila in everyday life (Armianti et al., 2024). Therefore, the use of technology-based media such as

interactive multimedia as part of the learning strategy is a relevant and effective step in improving the quality of learning, especially in Pancasila Education.

Interactive multimedia is learning media that contains text, video, audio, images, animations, graphics and so on. This media is widely used to make learning media more interesting for students (Ardian et al., 2020). Interactive multimedia is one of the learning media that can help the computer-based teaching and learning process. Interactive multimedia which is a combination of text, images, animation, sound, and video requires the involvement of many senses in the learning process (Robbia & Fuadi, 2020). This media is equipped with a controller that can be operated by the user, so that they can choose what they want. Therefore, interactive multimedia is a complex and effective media and has controls in the form of navigation buttons that can allow interaction between applications and users (Erwin & Yarmis, 2019). Interactive multimedia is a medium that contains text, video, audio, images, animations that are used to attract students' learning interests in achieving more effective learning goals.

According to Ricardus Jundu et al, (2020) the problem of low student learning outcomes in elementary schools is not only in the use of media, but also influenced by many factors. For example, teachers tend to use the lecture learning method so that learning becomes monotonous and boring (Fazri & Nuria, 2024). , the learning process still factual with the dominance of the lecture method. To create interesting and interactive learning, it must use an interesting model in the learning process such as an inquiry model that makes students more active, think critically, and understand the material concretely.

The research "Application of the Inquiry Learning Model to Student Learning Outcomes in Civic Education (Civics) Subjects in Class VI of SD Negeri 040527 Tigapanah Semester II T.P 2019/2020" shows that the inquiry learning model is the most effective way to improve student learning outcomes. effective in improving student learning outcomes. Cognitive results increased from an average of 63.33 in cycle I to 83.33 in cycle II, with the number of completed students increasing from 9 to 21. In addition, this model also improves affective and psychomotor aspects, where students are more motivated, dare to express opinions, and think critically in group discussions (Angin, 2022). This shows that the inquiry model not only improves students' cognitive learning outcomes, but also brings positive changes to the affective and psychomotor aspects. With its relevance to 21st century competencies, such as critical thinking and collaboration, this model is an effective solution to improve student learning outcomes. Research by Baden et al. (2023) also proved that the inquiry model has a significant impact on the learning outcomes of grade VI primary school students, with a 50% contribution to the improvement of their learning outcomes (Fazri & Nuria, 2024). The inquiry model is a learning activity in which learners are encouraged to learn through their own active engagement with concepts and principles (Nababan, et al., 2023). Inquiry learning is a learning activity that maximally involves all students' abilities to seek and investigate a natural phenomenon, living things or objects, systematically critically, analytically and logically (Dewanto et al., 2021).

This interactive multimedia and inquiry model can help create a learning process based on the theory of constructivism according to Lev Vygotsky, where students can think critically to solve problems, find ideas and make decisions. Students will understand better because they are directly involved in building new knowledge, they will understand better and be able to apply it in all situations. In addition, students are directly involved actively, they will remember all the concepts longer (Wahab & Rosnawati, 2021).

In the initial observations made by researchers at SDN 056425 Damar Seratus, especially class V in Pancasila education lessons, researchers found the fact that the learning process in the classroom still uses a conventional learning model, where the teacher only acts as a conveyor of information, while students are passive as listeners. This model does not involve students actively, thus inhibiting the development of students' critical thinking skills. In addition, the learning media used is still limited to printed books and blackboards, without

any supporting tools or media that can enrich students' learning experience. This condition causes the learning process to be not concrete, so students have difficulty in understanding the material taught, especially those that are complex. As a result, students quickly feel bored, lose interest in learning, and find it difficult to focus during the learning process.

The use of inquiry-based interactive multimedia that can support active, interesting, and technology-based learning has never been applied in class. So that the lack of innovation in learning models and media has an impact on low student motivation and suboptimal learning outcomes. When researchers observed the grade V teacher's score book, it was found that student learning outcomes in Pancasila Education subjects were still relatively low. This indicates that students have not reached an adequate level of understanding of the material taught. Student learning outcomes in the subject of Pancasila Education can be seen in table 1 below:

Table 1: Student Worksheet Results in Chapter 1 of Pancasila in My Life, Grade V Pancasila Education Subjects at SDN 056425 Damar Seratus

No.	Value	Category	Total	Percentage
1.	< 75	Not completed	15	66%
2.	≥ 75	Completed	12	34%
Total			27	100%

(Source: Class V teacher of SDN 056425 Damar Seratus TP. 2024/2025)

Table 2: Affective Learning Outcomes of Pancasila Education of fifth grade students of SDN 056425 Damar Seratus

Academic Year	Semester	Number of Students	Highest Score	Lowest Score	Average	KKM
2023/2024	Odd	31	83	71	71	75
2023/2024	Even	31	85	73	73	75

(Source: Grade V Grade List of SDN 056425 Damar Seratus TP.2023/2024)

Based on table 1 shows that out of 27 students in grade V TP. 2024/2025, only 12 students achieved a passing score on the material *Pancasila in My Life* in the subject of Pancasila Education, while the other 15 students did not pass. This shows that students' learning outcomes on the material are still relatively low, with the majority of students not meeting the passing criteria. Based on table 2, it is known that the affective value of students in the subject of Pancasila education is still relatively low and has learning outcomes who have not completed with an average score still below the KKM of 75.

The low learning outcomes are reinforced by the results of interviews conducted by researchers with grade V teachers and students. The results of interviews with V grade teachers and students revealed various problems that affect low learning outcomes in Pancasila Education subjects. The teacher said that the learning process still uses a conventional model that does not involve students actively. This causes some students to not focus during the learning process, disturb other friends so that the learning atmosphere becomes not conducive, and often cheat when given questions. While the results of interviews from several students, they stated that they were less interested in Pancasila Education lessons because the learning process was dominated by memorising activities, taking notes or doing questions.

This approach makes students only imagine the material presented by the teacher without concrete experiences that support their understanding. As a result, there are misperceptions between the information conveyed by the teacher and the understanding obtained by students. This creates monotonous and uninteresting learning, so students lose their motivation to learn.

The factor of low learning outcomes can be viewed from two main aspects. The internal aspect is students' lack of interest in Pancasila Education lessons, which is caused by the lack

of relevance of learning methods to their learning needs. External aspects, namely the lack of use of innovative learning models and media, which should be able to help students understand concepts better. This situation shows the need for learning innovations, such as the application of inquiry models with interactive multimedia support, to create more interesting, concrete and meaningful learning for students.

Based on the above problems, the researchers are interested in conducting research on "Development of Inquiry-Based Interactive Multimedia to Improve Learning Outcomes of Grade V Students of Pancasila Education Lessons at SDN 056425 Damar Seratus".

METHOD

The type of research used is Research and Development (R&D) or commonly referred to as research and development. The development design in this study uses the Analysis Design Development Implementation Evaluation (ADDIE) model by Robert Maribe Brach. The ADDIE model consists of five stages, namely analysis, design, development, implementation, and evaluation. The product developed in this research is an interactive multimedia based on the inquiry model specifically designed for learning Pancasila Education on the material Chapter I Pancasila in My Life. This interactive multimedia is equipped with various features such as audio, video, visual, and interactive games to increase the attractiveness and effectiveness of learning. This research was conducted at SDN 056425 Damar Seratus. The product test subjects were grade V students of SDN 056425 Damar Seratus totalling 27 students consisting of 12 male students and 15 female students.

RESULTS AND DISCUSSION

1. Test Instrument Test Results

a) Test Validity

To determine whether the instrument is valid or not, *the product moment* correlation formula is used (Arikunto, 2010):

$$r_{xy} = \frac{N(\sum X Y) - (\sum X \sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\} \{N\sum Y^2 - (\sum Y)^2\}}}$$

$$r_{xy} = \frac{31(267) - (23.335)}{\sqrt{\{31.23 - (23)^2\} \{31.3977 - (335)^2\}}}$$

$$r_{xy} = \frac{8277 - 7705}{\sqrt{\{184\} \{11062\}}}$$

$$r_{xy} = \frac{572}{\sqrt{2035408}}$$

$$r_{xy} = 0,401$$

By comparing r_{tabel} for $N=31$ and significance level $\alpha = 0.05$, $r_{\text{tabel}} = 0.355$. Question number 1 is valid because $r_{\text{count}} > r_{\text{tabel}}$ or $0.401 > 0.355$. So on until item number 20. If $r_{\text{count}} > r_{\text{tabel}}$ then the item number data is valid. After r_{count} is consulted with r_{tabel} at the significance level $\alpha = 0.05$ and $N = 31$ it turns out that of the 20 questions tested there are 16 valid questions. Thus, 15 valid questions were used as learning outcome tests to collect research data. The following table shows the data of valid and invalid questions:

Table 3. Valid and Invalid Questions

No.	Validity Index	About	Total	Percentage
1.	> 0.355 (Valid)	No. 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 20	16	80%
2.	< 0.355 (Invalid)	No. 6, 13, 18, 19	4	20%

b) Test Level of Test Difficulty

The results of the level of difficulty test are as follows:

Table 4. Test Level of Test Difficulty Results

No.	Test Difficulty Level	Description
1.	0.7419	Easy
2.	0.7097	Easy
3.	0.581	Medium
4.	0.645	Medium
5.	0.7097	Easy
6.	0.5806	Medium
7.	0.7419	Easy
8.	0.4516	Medium
9.	0.4194	Medium
10.	0.4194	Medium
11.	0.258	Difficult
12.	0.2903	Difficult
13.	0.6452	Medium
14.	0.3548	Medium
15.	0.4516	Medium
16.	0.7419	Easy
17.	0.4516	Medium
18.	0.6452	Medium
19.	0.3548	Medium
20.	0.6129	Medium

c) Distinguishing Power Test

A good test should also be able to differentiate between good, fair, and poor students. The results of the power difference (D) test are as follows:

Table 5. Distinguishing Power Test Results

No.	Distinguishing Power	Description
1.	0.3348	Simply
2.	0.47059	Good
3.	0.35747	Simply
4.	0.37557	Simply
5.	0.2579	Simply
6.	-0.0498	Bad
7.	0.1991	Bad
8.	0.45701	Good
9.	0.3801	Simply
10.	0.3213	Simply
11.	0.3439	Simply
12.	0.3439	Simply
13.	0.181	Bad
14.	0.3032	Simply
15.	0.5339	Good
16.	0.33484	Simply
17.	0.53394	Good
18.	0.10407	Bad

19.	0.2262	Simply
20.	0.23982	Simply

d) Test Reliability

To test the reliability of the test, the following variance (S²) is sought first: Test reliability is determined by the Kuder Richardson (KR-20) formula (Sugiyono, 2017). From the table it is known:

$$N = 31 ; \Sigma Y = 335 ; \Sigma Y^2 = 3977 ; n = 16$$

To calculate the reliability of the test, first find the variance (S²) as follows:

$$\begin{aligned} S^2 &= \frac{N \sum Y^2 - (\Sigma Y)^2}{N(N-1)} \\ &= \frac{31 \cdot 3977 - (335)^2}{31(31-1)} \\ &= \frac{123287 - 112225}{930} \\ &= 11,894 \end{aligned}$$

KR-20 formula:

$$\begin{aligned} r_{11} &= \left(\frac{n}{n-1} \right) \left(\frac{S^2 - \sum pq}{S^2} \right) \\ r_{11} &= \left(\frac{16}{16-1} \right) \left(\frac{11,894 - 3,5525}{11,894} \right) \\ r_{11} &= 1,0666 \times 0,7013 = 0,7480 \end{aligned}$$

By analysing r_{11} with r_{tabel} product moment with $N=31$ and real level $\alpha = 0.05$, obtained $r_{\text{tabel}} = 0.355$. So, it can be obtained that $r_{\text{count}} > r_{\text{table}}$, which means $0.7480 > 0.355$. Therefore, it can be concluded that the issue as a whole is reliable.

2. Expert Validation Questionnaire Analysis

a) Description of Data Validation of Learning Outcome Instrument Experts, Materials, Media, Design, and Educational Practitioners

The average validation percentage of each component is using the following formula (Sugiyono, 2017):

$$P = \frac{\sum \chi}{N} \times 100\%$$

Table 6. Percentage of Achievement

No.	Achievement Level %	Qualification	Description
1.	81-100	Very worthy	No need for revision/ Valid
2.	61-80	Worth	No need for revision/ Valid
3.	41-60	Decent enough	No need for revision/ Valid
4.	21-40	Less feasible	Revised/Invalid
5.	0-20	Not worth it	Revised/Invalid

(Source: (Muriati, 2014))

With the results presented in the following table:

Table 7. Expert Validation of Learning Outcome Instrument

No.	Learning Outcomes	Total Score	Average Percentage Score	Criteria
1.	Cognitive	53	96,3%	Very Decent
2.	Affective	47	94%	Very Decent
3.	Psychomotor	49	98%	Very Decent

Based on table 7, there are 3 aspects that are validated, namely cognitive, affective, and psychomotor learning outcomes. The results of the assessment of the cognitive learning outcomes instrument obtained a total score of 53 and an average score of 96% or included in the criteria are very feasible. The results of the affective learning outcomes instrument assessment obtained a total score of 47 and an average score of 94% which is included in the very feasible criteria. The results of the assessment of psychomotor learning outcomes instruments obtained a total score of 49 and an average score of 98% which is included in the criteria very feasible.

Table 8. Expert Validation of Material, Media, Design, and Educational Practitioners

No.	Expert Validation	Total Score	Average Percentage Score	Criteria
1.	Material	73	97%	Very Decent
2.	Media	92	92%	Very Decent
3.	Design	56	93%	Very Decent
4.	Education Practitioner	97	97%	Very Decent

Based on table 8, there are 4 expert validations, namely validation of material experts, media, design, and educational practitioners. The results of the material quality assessment obtained a total score of 73 and an average score of 97% which is included in the very feasible criteria. The results of the media quality assessment obtained a total score of 92 and an average score of 92% which is included in the very feasible criteria. The results of the design quality assessment obtained a total score of 56 and an average score of 93% with very decent criteria. results of the media quality assessment assessed by educational practitioners, namely teachers, obtained a total score of 97 and an average score of 97% which is included in the very feasible criteria.

b) Description of Data Recapitulation of Individual and Small Group Test Student Responses

The average validation percentage of each component was using the following formula:

$$Ps = \frac{\sum n}{\text{Score Maksimal}} \times 100\%$$

(Sumber: Arikunto, 2010)

Table 9: Percentage Criteria for Student Response

Percentage	Criteria
84% < score ≤ 100%	Very good
68% < score ≤ 84%	Good
52% < scores ≤ 68%	Good enough
36% < score ≤ 52%	Not good
20% < score ≤ 36%	Very poor

(Source: (Indriyanti et al., 2020))

With the results presented in the following table:

Table 10: Individual Test

No.	Expert Validation	Total Score	Average Percentage Score	Criteria
1.	Individual Test	87	91,5%	Very good

Based on table 10, it can be seen that the results of the media quality assessment assessed by students obtained a total score of 87 and an average percentage score of 91.5%. If converted to qualitative data, it is included in the **very good** criteria.

Table 11: Data on the Recapitulation of Small Group Test Student Responses

No.	Student Name	Total Score	Average Percentage Score	Category
1.	Keke	87	91,5%	Very good
2.	Natasya	89	93,6%	Very good
3.	Shelvi	86	90,5%	Very good
4.	Elen	86	90,5%	Very good
5.	Aulia	90	94,7%	Very good
6.	Nadhifa	88	92,6%	Very good
7.	Naila	88	92,6%	Very good
8.	Tuesday	88	92,6%	Very good
9.	Neat	89	93,6%	Very good
10.	Rizal	90	94,7%	Very good
Student Overall Average Score		88,1	92,6%	Very good

Based on table 11, the results of the small group trial, the average score of the media display aspect assessed by students was 88.1 with an average percentage score of 92.6% in the **very good** category. Overall, the data obtained concluded good acceptance and positive assessments from grade V students of SDN 056425 Damar Seratus.

3. Analysis of Affective and Psychomotor Questionnaires

Table 12. Affective and Psychomotor Learning Outcomes

No.	Learning Outcomes	Total Score	Average Percentage Score	Criteria
1.	Affective	44,9	89,9%	Very good
2.	Psychomotor	37,7	75,4%	Good

Based on table 12, the results of the analysis of self-assessment questionnaire data obtained an average score of 44.9 with an average percentage score of 89.9%, this proves that the affective aspects of students have changed significantly with a very good category. While the results of Analysis of questionnaire data on the assessment of psychomotor aspects with an average score of 37.7 with an average percentage score of 75.4%, this proves that the psychomotor aspects of students have changed significantly with a good category. With this data, there is a significant change in the affective and psychomotor aspects of grade V students of SDN Damar Seratus after learning using *inquiry-based* interactive multimedia in the form of *articulate storyline* 3.

4. Test Analysis of the Effectiveness of Inquiry-Based Interactive Multimedia

a) N-Gain Test

Gain analysis with the formula (Hake, 1999), namely :

$$\begin{aligned}
 <g> = \frac{(\%<S_f> - \%<S_i>)}{(100 - \%<S_i>)} \\
 g &= \frac{71,8 - 33,1}{100 - 33,1} = 0,57
 \end{aligned}$$

Based on the results of the calculation, the result is 0.57 which is rounded up to 0.6 from these results it can be concluded that there is an increase in student learning outcomes (*gain*

score) and is classified as moderate. The results of the N Gain test can be seen in the following table:

Table 13. N Gain Test Results

No.	Posttest	Pretest	Post – Pre	Ideal Score (100 - Pre)	N Gain Score	N Gain Score (%)
1	53.3	26.7	26.6	73.3	0.362892	36.28922
2	66.7	33.3	33.4	66.7	0.50075	50.07496
3	73.3	13.3	60	86.7	0.692042	69.20415
4	53.3	33.3	20	66.7	0.29985	29.98501
5	73.3	46.7	26.6	53.3	0.499062	49.90619
6	60	33.3	26.7	66.7	0.4003	40.02999
7	53.3	40	13.3	60	0.221667	22.16667
8	80	20	60	80	0.75	75
9	66.7	26.7	40	73.3	0.545703	54.57026
10	86.7	40	46.7	60	0.778333	77.83333
11	60	33.3	26.7	66.7	0.4003	40.02999
12	80	26.7	53.3	73.3	0.727149	72.71487
13	73.3	46.7	26.6	53.3	0.499062	49.90619
14	86.7	53.3	33.4	46.7	0.715203	71.52034
15	60	13.3	46.7	86.7	0.538639	53.8639
16	73.3	33.3	40	66.7	0.5997	59.97001
17	66.7	46.7	20	53.3	0.375235	37.52345
18	66.7	20	46.7	80	0.58375	58.375
19	93.3	33.3	60	66.7	0.89955	89.95502
20	86.7	53.3	33.4	46.7	0.715203	71.52034
21	73.3	40	33.3	60	0.555	55.5
22	93.3	20	73.3	80	0.91625	91.625
23	80	33.3	46.7	66.7	0.70015	70.01499
24	66.7	26.7	40	73.3	0.545703	54.57026
25	80	40	40	60	0.666667	66.66667
26	60	26.7	33.3	73.3	0.454297	45.42974
27	73.3	33.3	40	66.7	0.5997	59.97001
Mean	71.84815	33.08148	38.76667	66.91852	0.575635	57.56354
Standard Deviation	11.74519	10.85821	14.21007	10.85821	0.17285	17.28505

b) Hypothesis Test

Hypothesis testing was carried out with a one sample t test which aims to determine whether there is a difference in student learning outcomes before being given treatment (inquiry-based interactive multimedia) with student learning outcomes after being given treatment (inquiry-based interactive multimedia) in the subject of Pancasila Education class V at SDN 056425 Damar Seratus TP. 2024/2025. The results of the one sample t test with the formula (Sugiyono, 2017) are as follows:

Determining t_{table} :

$$t_{table} = t_{0,05,26} = 1.705$$

Determining the t_{count} :

$$t_{count} = \frac{57,56354 - 30}{17,28505/\sqrt{27}} = \frac{27,56354}{3,3265} = 8,286$$

So, t_{table} is 1.705 and t_{count} is 8.286.

Based on the results of hypothesis testing with a significant level of 0.05, the $t_{\text{count}} = 8.286$ and the $t_{\text{table}} = 1.705$ because the $t_{\text{count}} > t_{\text{table}}$ ($8.286 > 1.705$), then H_a is accepted and H_0 is rejected in other words that there is a significant increase in student learning outcomes by using *inquiry-based* interactive multimedia in the learning process in the subject of the study.

CONCLUSION

Based on the results of research and development, data analysis and discussion that has been carried out, several conclusions are obtained, among others:

1. The developed *Inquiry-Based* Interactive Multimedia in the form of *Articulate Storyline 3* is declared feasible to be used as learning media in learning Pancasila education material chapter 1 Pancasila in Life in class V SDN 056425 Damar Seratus. The results of the validation of media experts, design experts, material experts, expert educational practitioners, and the results of field trials (individuals, small groups and large groups) obtained that the media products developed are suitable for use with very good categories.
2. The developed *Inquiry-Based* Interactive Multimedia Product in the form of *Articulate Storyline 3* is also effectively used in learning Pancasila education material chapter 1 Pancasila in Life in class V SDN 056425 Damar Seratus. The effectiveness of the media products developed is evidenced by the N-Gain test and hypothesis testing. In the N-Gain test, the result is 0.6 and in the hypothesis test, the result is $t_{\text{count}} = 8.286$ and $t_{\text{table}} = 1.705$ so that $t_{\text{count}} > t_{\text{table}}$, then H_a is accepted H_0 is rejected.
3. In addition to effectively improving cognitive learning outcomes in students, *inquiry-based* interactive multimedia in the form of *articulate storyline 3* is also effective in changing affective and psychomotor aspects in students. In the affective aspect, the average score is 44.9 with an average percentage score of 89.9%, this proves that the affective aspects of students have a significant change with a very good category. In the psychomotor aspect, the results obtained with an average score of 37.7 with an average percentage score of 75.4%, this proves that the psychomotor aspects of students have a significant change with a good category.

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