DEVELOPMENT OF LOCAL WISDOM-BASED ANIMATED VIDEOS TO IMPROVE PROCEDURE TEXT WRITING SKILLS

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Abstract

This research aims to create animated video content based on local wisdom to enhance students' proficiency in creating procedure texts. This study, which falls under research and development (R&D), employed the ADDIE paradigm, which has five stages: analysis, design, development, implementation, and evaluation. The evaluation of media development included 23 fourth-graders, two teachers, and material and media validation. The methods used to acquire the data included performance, documentation, interviews, observation, and questionnaires. The paired t-test and the N-gain test were used for the final data analysis, while the normality test was employed for the initial data analysis. The results of media validation by material experts obtained a percentage of 91% (very feasible), and media experts obtained a percentage of 90% (very feasible). The results of the pretest and post-test assessments were calculated using N-gain for small groups to increase by 74% with an average difference of 30% and for large groups to increase by 68% with an average difference of 24%. The t-test was used to assess the difference. The results of the pretest and post-test evaluations showed a significant difference, with a value of 0.000009<0.05 for the small group and a value of 0.000000002<0.05 for the large group. Based on these data, it can be concluded that making local wisdom-based animated video media to improve students' procedure text writing skills is valid, feasible and effective to be used in the learning process.

Keywords: *Local wisdom-based animated videos; Writing skills; Procedure texts*

I. Introduction

Technology has significantly impacted people's lives, particularly in education, where the learning process now focuses on students, with teachers is only to facilitate. Teachers as facilitators must

behave well and have competence in responding to and understanding differences in student characteristics [1]. Teachers provide services to all students to carry out the learning process in a happy atmosphere, encouraging students to express their opinions without fear. Professional teachers must consider the ideals and forms of teacher preparation to carry out the learning process with a more comprehensive intellectual and creative model with the teacher's abilities [2].

. Technological development also plays a vital role in bringing about inovation and advancement in the generation. This means that to enhance sustainable learning methods and be able to take action to identify the goals of the current challenges, teachers must conduct research [3]. The education sector must innovate to foster quality education, promoting optimal learning both independently and in the classroom, and implementing process standards for planning, implementation, and assessment. Education process standards are guidelines for carrying out the learning process effectively and efficiently, intended to maximize students' potential, drive, ability, and independence [4]. Teachers are considered to be developing the education process standards if they develop and innovate in learning methods, materials, resources, and media.

The most crucial innovation for educators is learning media. This is because the media plays a crucial role in helping students comprehend the ideas covered in the classes they are studying. Innovative learning media designed by teachers can create a pleasant learning atmosphere to make students active and creative in participating in learning activities [5]. One element that is essential to the teaching and learning process is learning media [6]. Learning media can help students learn more effectively by helping to communicate abstract concepts more concretely (naturally). Learning media, is a tool that supports and enhances the learning process by helping to make the message more clear and maximise the learning process's goals [7]. Learning media need to be carefully planned and produced to support students' engagement in the learning process and help them understand the material.

Utilizing technology well can help to innovate updates to learning media through platforms available on the internet. Animated videos are one of these platforms that can be utilized as educational resources for students. Animated video media is a type of media that uses the ability of the senses of hearing and vision. Animated video media helps the learning process, and the material in it becomes interesting for students [8]; this will make the material accessible for students to understand and make it simpler for educators to communicate the required content. Meanwhile [9], learning animation videos are animated videos that contain material and video lessons that are used as learning media for elementary schools; this is because they can focus students' attention, are funny, engaging, and suitable for elementary school students to apply. Learning video media can present a concrete understanding that facilitates students' ability to capture the content presented

[10]. Based on some of the above opinions, An educational tool that is used to support learning is animated video, and it packaged in cartoon-shaped moving images. In addition to displaying cartoon-shaped moving images, animated videos can also present sounds that interest the audience. The sound presented usually uses the correct language and is easily understood by the listener.

Language cannot be separated from human life; humans use language to be able to interact with other humans. Human interaction can be through writing or speaking, contained in language. Like education, language is also essential; humans can only run life properly with language. Indonesian is the national language used in Indonesia; it is also one of the subjects taught in Elementary School. Enhancing one's proficiency in speaking and writing Indonesian is the aim of studying the language [11]. Indonesian language learning is one subject that can improve students' language skills. Indonesian language learning supports success in learning other subjects because other subjects use Indonesian [12]. Indonesian is also used to foster an appreciation for existing literary works. Indonesian language subjects in elementary schools have four skills: listening, reading, speaking, and writing [11].

Writing abilities are vital and need to be encouraged in a learning process where teaching children how to write is one of the most important things they can learn. Students must learn to write if they are to thrive in their academic endeavors, careers, and personal lives [13]. Writing is a skill used to communicate indirectly and not face-to-face with other people [14]. Meanwhile [15], writing is a skill that requires a person to be able to string various words into a written work. Writing skills are not only stringing letters into words in writing but, rather, expertise in pouring ideas in mind into writing, which are then communicated to the reader. This aligns [16] that writing requires a thinking process to express ideas or messages (information). Writing skills cannot be separated from critical and creative thinking activities [17]. Writing skills also require creativity from students. In addition to pointing the way toward instructional interventions that will foster each student's creative potential, student creativity can assist in identifying the creative behaviour of all [18]. Furthermore, one language skill that needs practice is writing [19]. Writing skills that are trained and honed continuously will produce students' creative potential, which can create a text that can produce work for students. There are many types of texts taught in Indonesian language subjects in elementary school, Procedure text is one of them.

Procedure text is a text that contains procedures for making something. A process text as a document that outlines the procedures or stages that must be taken in order to complete an activity in a methodical way that ensures accuracy [20]. This aligns [21] with the opinion that procedure text contains steps or tips for making or doing something. Meanwhile, [22] a process text is a type of text that outlines the actions or stages that must be followed in order to finish a task quickly and

correctly. Many activities, therefore, require following procedures in order to facilitate activity completion and reduce failure. Another response [23], explains that a procedure text is a text that outlines the actions that must be taken in order to accomplish a certain task. When studying procedure text, students are required to understand the content contained in the text and write procedure text.

When delivering the material for writing procedure texts in building students' ideas, teachers can utilize various things that are close to the students' school environment. For example, it relates to local wisdom owned in a region in the student's environment. It is undoubtedly related to the various regional cultural diversity owned by the State of Indonesia, which has become a local wisdom value owned by a region. There is so much natural and cultural diversity that influences the habits, ethics, and behavior of Indonesian people, resulting in the country being rich in local wisdom [24]. Local wisdom has a high cultural value and is an essential habit ingrained in a certain group [25]. Another response, [26], is that one cultural asset of the local community is local wisdom that has many exemplary life wisdom that should be remembered as a guide to life. By incorporating local wisdom into education, one can foster a greater appreciation for the local knowledge of the area one owns and help to maintain it amidst the massive cultural influence of other regions brought about by globalization.

The conditions in the field found by researchers still need to be consistent with the ideal conditions of the existing education process standards. The problem was obtained from the interviews and observations researchers conducted on November 29, 2023. The teaching and learning processes in SDN 01 Wonokerso face challenges such as distractions, limited learning media, and a need for special Indonesian language media. Many students receive grades below the KKM, indicating the need for innovation in learning media. Animated video material based on local wisdom can increase student learning outcomes and motivation. The animated video can attract students' attention and make the subject more familiar by presenting the material in an attractive display with moving cartoon images. This approach keeps students engaged and enhances learning outcomes by keeping them engaged and interested in the process.

Furthermore, the animated video's native language subtitles will result in the greatest teaching efficiency and facilitate the efficient division of visual attention between the subtitles and the slide content [27]. Some supporters [28] suggest that Powtoon media can help SMK Negeri 1 Cipanas class XI students produce procedural texts more proficiently. Another researchers [9] found that animated video learning materials were validated by professionals and engaging animated video content.

The development of local wisdom-based animated video media is expected to motivate and attract students in learning Indonesian. This is because the animated video media has cartoon images and the explanation of the material is made interesting, so that it can attract attention and facilitate understanding of the steps of procedure text which is expected to improve writing skills.

Based on the background, the problem formulation of this research is as follows: (1) How is the design of the development of animated video media based on local wisdom for improving the skills of writing procedural texts of grade IV students of SD Negeri 01 Wonokerso Temanggung? (2) How is the feasibility of animated video media based on local wisdom for improving the skills of writing procedural texts of grade IV students of SD Negeri 01 Wonokerso Temanggung? (3) How much is the effect of animated video media based on local wisdom for improving the skills of writing procedural texts of grade IV students of SD Negeri 01 Wonokerso Temanggung?

Based on the formulation of the problem, the objectives of this study are as follows: (1) To describe the development design of local wisdom-based animated video media to improve the writing skills of fourth grade students of SD Negeri 01 Wonokerso Temanggung. (2) To determine the feasibility of animated video media based on local wisdom to improve the writing skills of fourth grade students of SD Negeri 01 Wonokerso Temanggung. (3) To find out the effect of animated video media based on local wisdom to improve the writing skills of fourth grade students of SD Negeri 01 Wonokerso Temanggung.

This research is expected to be used as a motivational material to be able to carry out Indonesian language learning of procedural text material that is more varied, stimulating, interesting, and makes it easier for teachers to convey learning material so as to create effective and maximum learning. Then for schools, it is hoped that it can be used to support schools to progress in learning Indonesian language procedural text material and improve students' procedural text writing skills, which are expected that writing skills can create great writers from students. As well as being able to contribute in the form of new concepts of knowledge and discourse about the development of animated videos that are useful in the learning process, especially Indonesian language subjects. In addition, it can also help improve the quality of education through animated video media.

II. Method

The development research approach (Research and Development) is the methodology used in this study. This development research is very concerned with the products produced. According to the opinion, this [29] that development research is a research method that produces certain products and tests their effectiveness. The resulting product can be new or redeveloped items. The products

produced in this development research are related to the world of education, namely animated video learning media. The steps of the ADDIE research paradigm are applied in the creation of this animated video learning resource. Several stages can produce a genuinely valid product in the ADDIE model. The five phases that make up the ADDIE research model are analysis, design, development, implementation, and evaluation [30]. ADDIE model is an approach that emphasizes the analysis of how each interacts with each other in a coordinated manner according to the phases [31]. The product presented in this study is an animated video media based on local wisdom of procedure text material; the implementation time of this research was on April 27-May 2, 2024 at SD Negeri 01 Wonokerso for a significant group test with 17 students and SD Negeri 02 Wonokerso for a small group test with six students. Validation subjects involved one material expert and one media expert, and response subjects involved two fourth-grade teachers.

The study utilized needs analysis, expert validation, and pretest and posttest to analyze media requirements for Indonesian language courses. Data was collected through observations, interviews, and surveys, with media validation focusing on learning objectives, material, and student thinking.

The study's media feasibility analysis technique, developed by the researcher, was evaluated by media and material experts, teacher and student responses, and validated using feasibility instruments and a Likert scale. A Likert scale was employed in the data analysis procedure, a method that converts qualitative data into quantitative data, as described by [32] . The data were then analyzed using a descriptive percentage test, providing a clear understanding of the product's performance.

$$\text{NP} = \frac{R}{SM} X\ 100\%$$

Description:

NP = percent of value requested

R = total score attained

M = highest possible score

100 = constant [33]

The percentage results were then converted into the following criteria [33].

Table 1.

Criteria for Product Feasibility Presentation Results

Percentage	Criteria
82% to 100%	Very Feasible
63% to 81%	Worth
44% to 62%	Decent Enough
25% to 43%	Not Feasible

The outcomes of the media feasibility test, which was carried out by qualified validators, are consulted in order to evaluate the viability of media products and identify any flaws that may be fixed. The analysis technique for teachers' and students' responses to the feasibility of animated video media based on local wisdom by teachers and students uses the same formula as the expert validation analysis technique.

In order to ascertain if the pretest and post-test findings are normally distributed or abnormally distributed, the normality test was examined as part of the study's first data analysis. Normality test analysis using Microsoft Excel using the *Liliefors* formula.

N-Gain analysis and the paired t-test were used for the final data analysis. The following hypothesis testing will be done in order to establish the efficacy of using animated video media based on procedure text using a paired t-test:

H_0: Local wisdom-based animated video media is not effective to be used in learning to improve procedure text writing skills.

H_a: Local wisdom-based animated video media is effective in learning to improve procedure text writing skills.

If *t count is* greater than *t table*, it can be concluded that H_0 rejected and H_a accepted. In this study, researchers used *Ms. Excel* with the following steps:

1. Make a table of student scores before and after *treatment*.
2. Pick the t-test option under Data analysis - Data menu: Two-paired sample for averages. The t-test table will then show up: Two-paired sample for averages.
3. Fill in Input *Variable 1 Range* with the range of student scores before *treatment*, and Input *Variable 2 Range* with the range of student scores after *treatment.* Then click OK.
4. The result will appear *t-test* file*: Paired Two Sample for Means* in a new *worksheet*. The calculated t is shown in the *t-stat* column, while the *t-table* is shown in the *t-critical two-tail* column.

The average increase test *(N-gain*) is used to determine whether students' abilities increase or not after treatment. This study uses normalized gain *(N-gain*). The *N-gain* value is formulated as follows:

$$N - Gain = \frac{skor\ posttes - skor\ pretest}{100 - skor\ pretest}$$

High and low *N-gain* values are determined by the criteria in the following table [33].

Table 2.

N-Gain Criteria

***N-Gain* Value**	**Criteria**
N-Gain ≥ 0.70	High
0.30< *N-Gain* <0.70	Medium
N-Gain ≤ 0.30	Low

III. Results and Discussion

Results

The results obtained in this study are local wisdom-based animated video media for procedure text material in grade IV Indonesian language subjects. This study is referred to as research and development (R&D) or development research. The ADDIE model is the development model that is applied. The following are the stages in this research.

3.1 Analyze

The study reveals that the learning process in a Temanggung school is teacher-centered, causing students to be less active and focused. Limited learning media and monotonous delivery of material make students easily bored. The lack of technology-based media and the lack of local wisdom in the region also hinders learning. Researchers plan to develop local wisdom-based animated video media to improve the writing skills of grade IV students in procedure texts.

3.2 Design

At this stage, the first step is to create a storyboard using the Mango Animate and Canva applications. The next step was to create a validity test questionnaire, student response test, and teacher response test, collect sources regarding procedure text material, and prepare the necessary equipment and software. The tools needed in the animation video development process are laptops and smartphones. Meanwhile, the software used is Mango Animate, Canva, and Capcut applications.

3.3 Development

At this stage, an animated video is made using the procedure text material from the storyboard to produce a commodity in the shape of a local wisdom-based animated video consisting of opening, content, and closing. The opening of the video which as shown in the image below.

Figure 1. Opening Section of Text-based Animated Video Procedure

Furthermore, the content section explains learning outcomes and objectives, material related to procedure text, and instructions for editing procedure text. The graphic below displays the content section of the video.

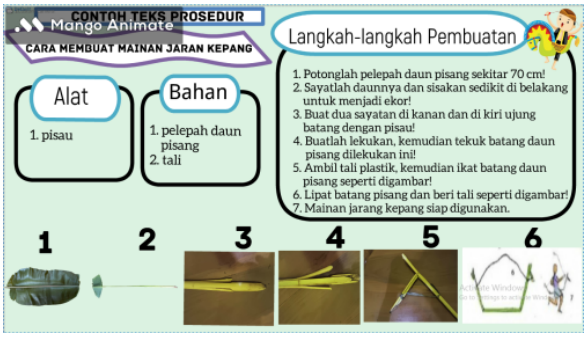


Figure 2. Contents of Text-based Animated Video Procedure

Finally, the closing section explains the bibliography, developer profile, and acknowledgments. The video content can be seen in the image below.

Figure 3. Closing section of the animated text-based procedure video

Furthermore, experts carried out material and media validation. This validation aims to determine the validity or feasibility of local wisdom-based animated videos on procedure text material. Two experts participated in material and media validation, and the results of acquiring assessment scores from validators are in Tables 3 and 4.

Table 3.

Results of Material Expert Validation Assessment

Aspects	Indicator	Score
Learning Objectives and Outcomes	a. Suitability of material with learning outcomes. b. How well the content fits the learning objectives.	8
Learning Materials	a. Clarity of material delivery. b. Learning flow.	25
Material Appropriate to Students' Level of Thinking	a. Material difficulty level. b. The material is relevant to real life.	11
Total Score		44

Table 4.

Media Expert Validation Assessment Results

Aspects	Indicator	Score
Software Engineering	a. Effective and efficient use of media. b. Reliable and Reusable. c. Usable. d. Correct selection of software type for development.	21
Learning Design	a. Outlining the learning goals. b. Presentation of learning media content. c. Learning motivation.	11
Visual Communication	a. Communicative. b. Creative. c. Animations are simple and engaging. d. Audio quality. e. Visual quality.	22
Total Score		54

The data obtained from the validator is then analyzed using calculations adapted by [33]. The validation results of the two aspects of material and media validation assessment are presented in the diagram below.

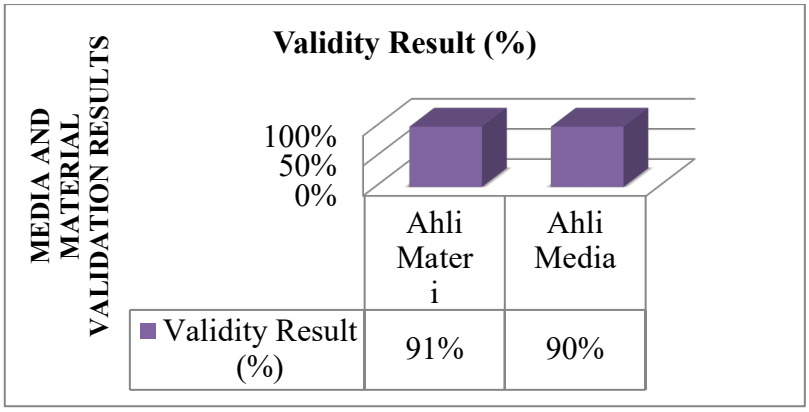
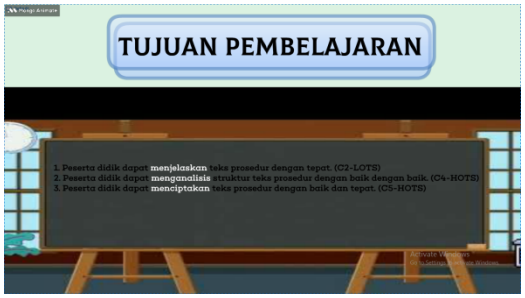
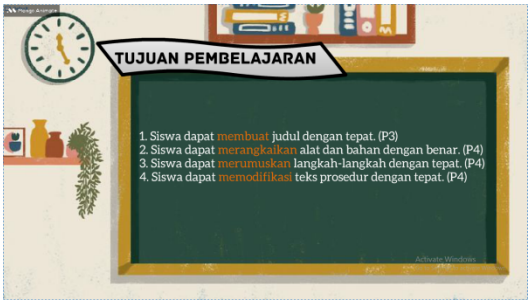


Figure 4. Media Validation Results

Based on the following diagram, the results indicate that 91% of local wisdom-based animation video media validation results are obtained by material experts, placing the results in the very valid group. A total percentage of 90% is obtained through validation by media professionals, putting the results in the very valid category. Based on the material validation, several parts of the video that must be improved, so the researchers made improvements, presented in Table 5. The following results improve the animated video based on the suggestions and input from the material expert validator in Table 5.

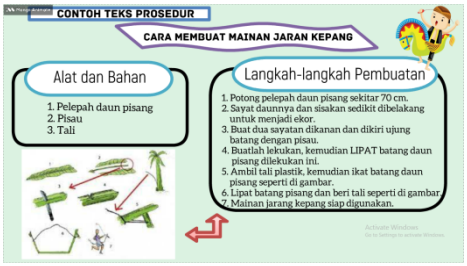
Table 5.

Revised Results of Animation Video Based on Local Wisdom on Procedure Text Material Based on Suggestions and Feedback from Material Expert Validators

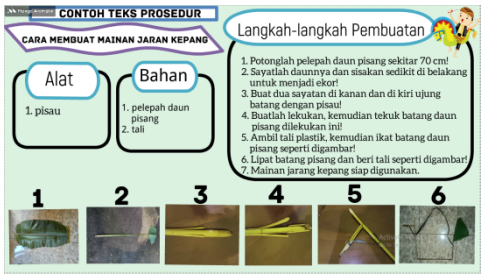
Before Revision	After Revision
The learning objectives still use the cognitive domain, it should use the psychomotor domain because what will be studied is writing skills.	Researcher learning objectives with the psychomotor domain.
	
This example of procedure text has a mistake in	The researcher separated the grouping of tools and

the tools and materials grouping.

not separated. Image presentation is still unclear.

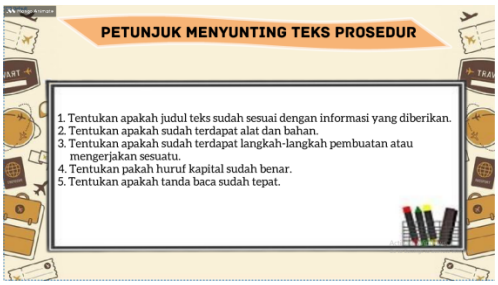


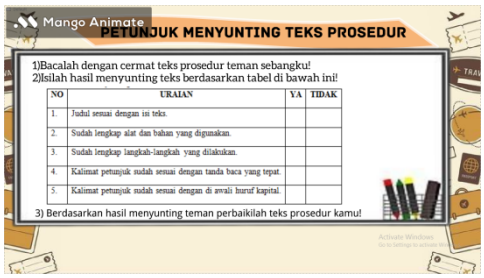
materials and presented the images more clearly.



The lack of tables in the recommendations for revising procedure documents will make it more difficult for students to comprehend the instructions.

The researcher added a table of guidelines for editing procedure texts.





3.4 Implementation

This implementation stage of local wisdom-based animated video learning media was tested in class IV SD Negeri 01 Wonokerso for the extensive group test and class IV SD Negeri 02 Wonokerso for the small group test. The efficacy of local wisdom-based animated video material is ascertained by analysing the pretest and posttest scores.

Table 6.

Psychomotor Learning Outcomes of Small Group Students

Action	Average	Highest Score	Lowest Score	Number of Students Completed	Learning Completeness
Pretest	58	70	44	1	16%
Posttest	88	99	78	6	100%

The results for the small group test in Table 6 show that the students' pretest scores averaged 58. The pretest's average percentage of completeness was 16%, with a KKM of 70; the highest score was

70, and the lowest was 44. On the post-test, students scored an average of 88, with the lowest possible score being 78 and the highest possible score being 99. At the time of the post-test, the average completion percentage was 100%.

The outcomes of the pretest and post-test were taken by 17 SD Negeri 01 Wonokerso Temanggung fourth-grade pupils are listed below.

Table 7.

Large Group Student Psychomotor Learning Outcomes

Action	Average	Highest Score	Lowest Score	Number of Students Completed	Learning Completeness
Pretest	63	83	42	7	41%
Posttest	87	96	75	17	100%

The pretest value of the students received an average score of 63, as indicated by Table 7's results for the small group test. With a KKM of 70, the maximum score was 83, the lowest was 63, and the average completion percentage attained during the pretest was 41%. The average score students received on the post-test was 87, with the lowest score being 75 and the best score being 96. At the time of the post-test, the average completion percentage was 100%. Learning completeness increased between the pretest and post-test. These findings suggest that the animated video media based on local wisdom has improved. The preliminary investigation of the normalcy of student psychomotor data in pretest and posttest scores is the next step, known as the initial data analysis. If the data is normally distributed, a parametric statistical formula is used to conduct the t-test; if the data is not normally distributed, a non-parametric statistical formula is used. The normality test aids researchers in selecting the following data analysis technique to be employed. The Microsoft Excel program was used to carry out the normalcy test. The outcomes of the small group test's normality test analysis of the pretest and posttest data are as follows.

Table 8.

Pretest and *Posttest* Data Normality Test Results on Small Group Tests

Data	Average	Standard Deviation	L Count	L table	Description
Pretest	58	10,0995	0,224	0,319	Normally Distributed
Posttest	88	7,73089	0,156	0,319	Normally Distributed

The L Count values for the pretest and posttest scores in the normalcy test are 0.224 and 0.156, respectively. The normalcy test criteria are standard if the L Count number is less than the L Table. The data is deemed abnormal if L Count> L Table has an abnormal value. Table 8 presents the results of the small group pretest normality test, which indicates that the data is usually distributed with 0.224 < 0.319. The post-test values' normality test findings indicate that 0.156 < 0.319, indicating that the data has a normal distribution. These findings support the hypothesis that the small group test's pretest and posttest data values follow a normal distribution. The following table shows the results of the *pretest* and *posttest* normality tests in the large group.

Table 9.

Results of the *Pretest* and *Posttest* Data Normality Test in the Large Group Test

Data	Average	Standard Deviation	L Count	L table	Description
Pretest	63	14,86805	0,163	0,206	Normally Distributed
Posttest	88	7,018882	0,113	0,206	Normally Distributed

The normality test for *pretest scores* has an L Count value of 0.163, and the post-test test has an L Count of 0.113. Normality test criteria are declared normal if the L Count value < L Table. If the L Count value> L Table, then the data is said to be abnormal. Table 9 shows that the significant group *pretest* normality test results show 0.163 < 0.206, so the data is usually distributed. The *post-test* normality test results show 0.113 <0.206, so the data shows a normal distribution. Based on these results, it is concluded that the *pretest and post-test* data values of the extensive group test are normally distributed. The researcher used parametric statistical techniques with the t-test formula to evaluate the difference between the average pretest and post-test after the pretest and post-test data were determined to be generally distributed after being tested for normality. The t-test is used to compare the average scores from the pretest and post-test, which is then used to assess how effective the medium is. This image displays the findings of the study's hypothesis test computation, which was done using Microsoft Excel. The following are the small group's t-test findings for the pretest and post-test.

Table 10.

Small Group Mean Difference Test Results

	Pretest	Posttest
Mean	58	88,16666667
Variance	102	59,76666667
Observations	6	6
Person Correlation	0,929837415	
Hypothesized Mean Difference	0	
Df	5	
t Stat	-18,15454558	
P(T<=t) one-tail	0,00000466	
t Critical one-tail	2,01504837	
P(T<=t) two-tail	0,00000932	
t Critical two-tail	2,57058184	

The paired sample t-test's evaluation criterion, P value (T <= t) two tails>0.05, requires that the pre- and post-test learning outcomes not differ significantly. The t-test results, with the P (T <= t) two tail being 0.00000932 <0.05, suggest a significant difference between the pre- and post-test scores in the small group test. The large group's t-test results for the pre- and post-tests are the following.

Table 11.

Large Group Mean Difference Test Results

	Pretest	Posttest
Mean	63,05882353	87,52941176
Variance	221,0588235	49,26470588
Observations	17	17
Person Correlation	0,965717152	
Hypothesized Mean Difference	0	
Df	16	
t Stat	-12,16707192	
P(T<=t) one-tail	0,000000001	
t Critical one-tail	1,745883676	
P(T<=t) two-tail	0,000000002	
t Critical two-tail	2,119905299	

The criteria for testing the *paired sample t-test* is if the P value (T <= t) two tail> 0.05, there is no significant difference between the pre-test and post-test learning outcomes. *The t-test* results show that the P (T <= t) *two tail* is 0.000000002, so 0.000000002 <0.05, so it can be concluded that there is a significant difference between the results of the *pre-test* and *post-test* scores in the considerable group test.

The following data analysis results from the average increase test *(N-Gain*) were used to analyse psychomotor abilities, namely, knowing the difference between *pre-test* and *post-test* scores. *N-gain* shows students' psychomotor results improved after using local wisdom-based animated video media. This *N-gain* test uses the *Microsoft Excel* application. The results of the *N-gain test* in small groups are as follows.

Table 12.

N-Gain Test Results on Small Group

Category	Average Value
Pretest	58
Posttest	88
Average difference	30
N-GAIN SCORE	0,74
Criteria	High

With an average difference of 30, the small group test rose by an average of 0.74, indicating that the N-gain test results meet the high requirement. These conclusions are based on the average increase test (N-Gain) results of pretest and posttest data calculated with animated video media based on local wisdom and displayed as tables and line diagrams. The N-gain test in the large group yielded the following results.

Table 13.
N-Gain Test Results in the Large Group

Category	Average Value
Pretest	63
Posttest	87
Average difference	24
N-GAIN SCORE	0,68
Criteria	Medium

Based on the results of the calculation of the average increase test (N-Gain) of pretest and posttest data using local wisdom-based animated video media presented in the form of tables, it shows that

the significant group test increased by an average of 0.68 with an average difference of 24, which can be concluded that the N-gain test results are included in the medium criteria.

3.5 Evaluation

This step analyses the responses to surveys from teachers and students. To ascertain the viability of local wisdom-based animated video media, educators and students filled out this feedback form after seeing local wisdom-based animated video media. The following are the survey findings given to teachers and students in response to the procedural written content presented in an animated video format based on local wisdom.

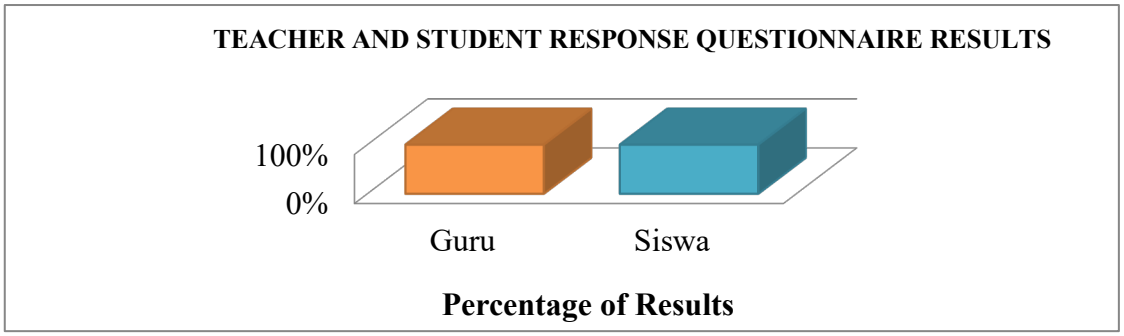


Figure 11. Bar Diagram of Teacher and Student Response Questionnaire Results

Based on the bar chart above, it can be concluded that the percentage of teacher responses is getting a positive reaction and obtaining a total percentage of 100%. The student response questionnaire also yields 100% positive responses, indicating a positive response rate.

Discussion

This research develops learning media, namely local wisdom-based animated videos, to improve writing skills of procedure texts in elementary schools. The improvement of writing skills can be seen in student learning outcomes after using local wisdom-based animated video media. The advantage of the applied animated video is that students are not only fixated on the procedure text, but the presence of a moving animation display can improve student learning outcomes [26]. The improvement of students' procedure text writing skills can be seen from acquiring student learning outcomes before and after using local wisdom-based animated video media. Before the media product was tested on students, researchers conducted a product validation test on material and media experts to determine the feasibility of the product. The results of the validation of local wisdom-based animated video media by media experts get a percentage of 91%, which is classified as a very valid category. The results of material expert validation get a total rate of 90%, which is

classified as a very valid category. These results align with research conducted by [33], which states that the calculation of validity, which produces a percentage in the range of 85.01-100%, is included in the category of very valid and can be tested in learning process activities. The results of the assessment by material experts and media experts show that the local wisdom-based animated video media is very valid or very feasible to test in the learning implementation process on procedure text material.

Implementation of local wisdom-based animated video media products is carried out to obtain data used to determine the effectiveness of the media. The small group test obtained t-test results show that P (T <= t) two tail is 0.00000932, so 0.00000932 <0.05, so it can be concluded that there is a significant difference between the results of the pretest and post-test scores in the small group test. The t-test results show that P (T <= t) two tail is 0.000000002, so 0.000000002 <0.05, so it can be concluded that there is a significant difference between the results of the pretest and posttest scores in the significant group test. Based on the paired sample t-test conducted in the small group test and the large group test, it can be concluded that the local wisdom-based animated video media is effectively used to learn procedure text material in Indonesian language subjects. This is in line with research [34], which shows that the use of animated videos in learning social studies subjects is effective.

The results of the pretest and post-test questions will be tested using the N-gain test, which aims to determine whether or not there is an increase in students' writing skills after and after using local wisdom-based animated video media. The results of the small group test N-gain test calculation increased by an average of 0.74 with an average difference of 30, which can be concluded that the N-gain test results are included in the high criteria. At the same time, the results of the N-gain test calculation in the significant group test increased by an average of 0.68 with an average difference of 24, it can be concluded that the N-gain test results are included in the medium criteria. It can be concluded that based on the results of the calculation of the average increase test (N-Gain) in the small group test and the significant group test, the use of animated video media based on local wisdom can improve students' ability to write procedure text so that the animated video media based on procedure text is effective to use. This aligns with research [8], which shows that animated video media using Powtoon software is effective.

The results of acquiring teacher and student response questionnaires are used to determine the feasibility of the product. The percentage of teacher responses is getting a positive response and obtaining a total rate of 100%. In comparison, for the results of the student response questionnaire also get a positive response with a total rate of 100%. Based on the results of the response questionnaire, it can be concluded that the local wisdom-based animated video media is very feasible

to implement in the procedure text material learning process for grade IV Indonesian language subjects. This is in line with research conducted by [34] which states that animated videos can facilitate teachers in the learning process by displaying material in the form of animated videos that can attract student interest in learning, and local wisdom-based animated videos can make it easier for students to understand the material and are effectively used in learning. It also agrees with the research conducted by [35] which states that local wisdom-based animated video media can make students more familiar with their regional culture without having to think abstractly and is suitable for use in learning.

IV. Conclusion

The study aims to develop local wisdom-based animated video media for Indonesian language subjects' procedure text material. Based on teacher and student needs analysis, the Mango Animated application will create customized videos, presenting procedure text examples and local wisdom-based images. Local wisdom-based animated video media get a feasibility assessment based on the material and media validation results, which are valid, with an average percentage of 91% for material validation and 90% for media expert validation. Teachers responded positively to local wisdom-based animated video media on procedure text material with an average percentage of 100%. This proves that local wisdom-based animated video media is very feasible to use. The development of local wisdom-based animated video effectively teaches Indonesian language procedural text material. This is evidenced by the increase in student psychomotor results in the pretest and post-test assessment results in the small group test of 0.74 with high criteria and in the significant group test of 0.68 with moderate criteria. Based on this, local wisdom-based animated video media can be used by teachers to deliver procedure text material because it is practical and feasible to use for the learning process. Further research is needed to address recommendations such as involving students or schools in product development, updating learning media concepts, and educating teachers about local wisdom-based animated video content to improve student learning outcomes.

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