Development of Animation Video Media (VA) Themes of National Events in the Colomination Period Class V Elementary School

Nurul Ikhsan Saputra [1], **Novanita Whindi AR** [2]

Program Studi Pendidikan Guru Sekolah Dasar, Fakultas Keguruan Dan Ilmu Pendidikan, Universitas Muhammadiyah Prof. Dr. Hamka

nurulikhsansaputra@gmail.com

Abstract

This study aims to (1) describe the design of learning animation videos, (2) describe the results of the validity of the development of learning animation videos, and (3) determine the effectiveness of the developed learning animation videos. The development model used is the Bord and Gall model. The data in this study were collected by interview and test methods. The instruments used in collecting data are interviews and objective tests. The results of the research are as follows. (1) Design an animated video made in a video script. This manuscript was turned into an animated video through the development stages of Bord and Gall. (2) The results of the validation of the animated video based on the assessment of media experts, namely 77.33% in the Eligible category, material expert, obtained a percentage of 91.66% with a very decent category, the assessment of education experts, obtained a percentage of 85.71% with a very decent category. Limited media test results obtained 81.78%, with a very feasible category. The results of the field media test obtained a percentage of 94% with a very feasible category. Thus the learning animation video developed is declared valid. (3) The effectiveness of the developed video is 82.89%. There is a significant difference in student learning outcomes between before and after using animated videos. Thus the animated video developed is effective in improving student learning outcomes. This study suggests that teachers use animated videos in learning that are developed in the learning process.

I. Introduction

The rapid development of technology and information in various aspects of life, including in the field of education, is an effort to bridge the life of the present and the future by introducing reforms that tend to pursue efficiency and effectiveness. Renewal in the learning process in the classroom is essential considering that in this modern era, the use of Information Communication and technology (ICT) is very much needed for teachers and students. The learning process consists of several elements, such as learning media.

Learning media are teaching aids that educators can use to help carry out the teaching and learning process in the classroom. In the learning process, the media is a significant component that is very important and cannot be separated. Moving animation videos is one of the learning media that can attract students' attention to focus more on learning material because moving animation videos present learning material in the form of animated videos that aim to provide opportunities for students to observe directly without having to be in the real place." (Irmawati D Ishak, 2021) Given the limited media available

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in schools, modern media updates are urgently needed. (Andriani, 2019) In this learning media, it is necessary to make it easier for students to understand abstract material, such as material on social studies learning content.

Social studies learning is one of the subjects included in the theme, especially in elementary schools. The purpose of the Social Sciences curriculum in 2004 is to examine a set of facts, concept events, and generalizations related to human behavior to build themselves, their society, their nation, and their environment based on past experiences that can be interpreted for the present and anticipation for the future (Alfianti et al. al. 2020).

One way to develop social studies learning is to use active learning media using effective learning media such as animated videos. So the use of this animated video is a very effective learning medium because it requires two senses, namely hearing, which requires ears or audio, and seeing requires eyes or visuals, so this animated video is a moving video with a message or information in it. There are various advantages of using animation in learning, such as animation that is designed to make learning not dull and can motivate student learning" (Saputra & Manuaba, 2021).

SDN 7 Toboali is a school that has minimal facilities. The school's location in the vicinity of the Teladan River is enough to make this school known in the surrounding community. The surrounding can directly feel the good and bad conditions of education quality. This can be reflected in the behavior of the students who attend SDN 7 Toboali and the teachers who educate them. Based on the author's initial observations at SDN 7 Toboali, it was found that there are still many learning media that only use print media, usually package books. At the time of delivery of material, sometimes there is the material that is difficult to understand and tends to be boring if only using printed learning media. This is because the textbook is a learning guide. This makes it difficult for students to understand, and they tend to be bored with the learning process in class.

Video Animation (VA) is a tool or access that can assist educators in implementing and presenting the learning process, such as presenting material with the help of a computer/laptop, VA, projector, or speakers. Learning media is needed to get effective learning outcomes and improve learning outcomes. The use of Video Animation (VA) is more accessible for students to understand the material presented by the teacher and motivate them to follow the learning process.

Furthermore, from the results of observations that I have done with educators, there is no use of VA learning media because, in class V, there is no supporting tool for making VA learning media. As we know, this VA-based media can make it easier for teachers and students to convey and receive material properly. The VA can contain material content and animations that attract student motivation.

Against the background of the above author takes the title: "Development of Animated Video Learning Media (VA) in the 2013 Curriculum for Social Sciences under the theme National Events of the Colonial Period for 5th-grade students of SDN 7 Toboali".

II. Research Method

This study uses the Borg and Gall research method, which consists of ten steps: potential and problems, data collection, design, design validation, product revision, product testing, product revision, usage trial, product revision, and production mass. Nevertheless, in this study, it was limited to the seventh, namely product revision. Because to reach the tenth, namely mass production, takes a long time. So this research is only to determine whether the product is feasible or not developed in seven steps. The seven steps are:
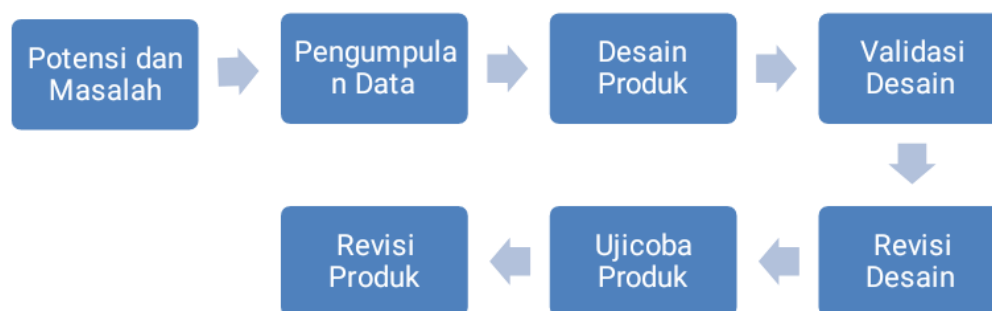
Figure 1. Seven Steps of Development

Data collection is done by collecting information about the product to be developed. Researchers seek information through journals, books, and the internet to support the development of animated video media.

In this study, the researcher used a validity that was used to fill out an assessment questionnaire that would be given to media experts, material experts, and education experts. It aims to determine whether a product made is suitable for use. The validation test is a test of the animated video product. Based on the quote, the validation test questionnaire is a benchmark for measuring the suitable assessment. Using an assessment questionnaire, respondents were asked to complete the required questionnaire to indicate their level of agreement with the questions or statements contained in the animated video with an assessment questionnaire. The assessment criteria are as follows:

Table 1. Questionnaire Assessment Criteria

Description	Score
Very Eligible	5
Eligible	4
Sufficient Eligible	3
Less Eligible	2
Very Less Eligible	1

Preliminary research was conducted at SDN 7 Toboali, which aims to discover problems in the learning process. In the preliminary, there were results that engaging learning media were needed to support the process of teaching and learning activities so that students could understand lessons that were difficult to understand. Therefore, animated video learning media is to these problems. The research method used during the preliminary research was observation and interviews in the R&D cycle. Initial research is carried out to find new products to be developed, and further research is used to develop products based on the findings. Tests are carried out repeatedly in limited trials and field tests. Then evaluation and revision activities were held to correct deficiencies in each product testing stage. Furthermore, the final result of product development is that the product can be used for learning process activities at school.

III. Results and Discussion

In the initial activity in developing this animated video learning media, researchers conducted observations and interviews with fifth-grade educators to discover the potential and problems at SDN 7 Toboali. The potential of SDN 7 Toboali is the availability of facilities and infrastructure such as projectors to support the learning process. Meanwhile,

the existing problem is that there are no learning media based on animated videos, educators' limitations in delivering the material, and the different levels of students' abilities in understanding the subject matter. With this background, the researchers developed animated video learning media to minimize learning problems in the classroom.

After finding the potential and problems, the next step is data collection is done by collecting information about the product to be developed. Researchers seek information through journals, books, and the internet to support the development of animated video media. Furthermore, preparing materials and questions in the animated video learning media refers to essential competencies and learning objectives.

Table 2. Basic Competencies and Learning Objectives

Basic Competencies (KD)	Learning Objectives
3.4 identify national events during the colonial period	1. Students can identify the background for national events during the colonial period. 2. students can explain national events during the colonial period by using standard vocabulary appropriately

The next stage is an animated video product produced in this research and development. The researcher made designs of the product to be developed, namely learning media for animated videos of the Colonial National Events.

The next stage of the media feasibility test is explained further from the Borg and Gall research model stage, namely design validation, design revision, and product testing. The trial was carried out by three validators who are experts in their fields, namely media experts, material experts, and education experts. This validation was done to determine the feasibility of an animated video of nationality events during the colonial period for class V to be tested on students.

3.1 Media Validation By Media Experts

Validation of media experts aims to find out the opinions of the validators from every aspect of the media developed. The questionnaire for instrument used to test, which was tested by media experts was carried out by Mr. Ahmad Ruslan, M.Pd

Table 3. Average Results Percentage of Each Aspect

Aspect	Number of Items	Score Maximum	Score Percentage	Conformity	Category
Content	2	8	10	80%	Very feasible
Appropriateness of display	5	18	25	72%	Eligible
engineering Device	5	20	25	80%	Very Valid
Average percentage				77,33%	Eligible

3.2 Validation of Material Experts

Validation of material experts aims to test the material's completeness, the material's truth, the material, the systematics of the material, and various other things related to the material. This test was carried out after the researchers completed the initial product in the form of an animated video learning media of the Colonial National Event. The lattice instrument for material experts is by the instrument used by Aprizal Lukman, Dwi Kurnia Hayati, and Nasrul Hakim in their research (Lukman, Hayati, and Hakim 2019). Which was tested by media experts was carried out by Mr. Abdullah, S. Pd. SD

Table 4. Average Percentage Results from Each Aspect

Aspect	Number of Items	Score Table	Score Maximum	Percentage	Category
Contents of material	6	30	30	100%	Very feasible
Feasibility of presentation	4	19	20	95%	Very feasible
Evaluation	1	4	5	80%	Very feasible
Average percentage				91,66%	Very feasible

3.3 Media validation by education experts

Table 5. Average Percentage of Each

Aspect	Number of Items	Score Maximum	Score Percentage	91.66	Category
Conformity content	7	30	35	85 ,71%	Very feasible
Average Percentage				85.71%	Very feasible

Based on the table above, it can be concluded that the animated video learning media of national colonial events is feasible to be tested in schools.

After that, the design is validated by material experts, media experts, IT experts, and education experts, and the weaknesses or shortcomings of the learning media can be identified. These weaknesses are then corrected to produce a good product. The finished product is then tested in learning activities. This trial is intended to obtain information from students. The product trial was conducted with a small group trial (7 people) and a large group trial (25 people) at SDN 7 Toboali. The number of respondents in the small and large group trials is based on research conducted by Ade Suryanda, Eka Putri Azrai, and Anita Julita (Suryanda, Azrai, and Julita, 2019).

Table 6. Suggestions and input

Validator	Criticism and suggestions
Media Experts	In the material, it is better to explain and add more material so that
the material expert	Improve the material that is not in accordance with the theme.

The media validation test, the average score for each aspect was 91.66%. The results obtained that the teaching materials based on the established criteria, the development of animated video learning media of the colonial period national events can be said to be "Very Appropriate." Based on the results of the media experts in the table, the next stage can get the average value of each aspect, which is 77.33%. The figure is based on the criteria set in 3 aspects: the suitability of media content, the suitability of the display aspect, and the suitability of device engineering. Animated videos are in the "very decent" category.

If there are parts of the product that are not as expected, the researcher will improve or revise the product until it becomes a final product ready to be used as a learning medium.

The revision results at a later stage will later enter into a limited product test and field test. This trial aims to see students' responses to learning materials in the form of skill-based animation videos in social studies learning. Themes of national events during the colonial period have been used.

The results obtained are shown in the table. In the limited trial stage, the figure was 81.78%, which proved that the teaching materials used received a "very feasible" category response from 7 students. Furthermore, the results of field trials obtained a figure of 84% of the 25 students in one class into the "very feasible" category.

The results of the two trials obtained an average of 82.89%, based on the numbers category. It shows that the animated video teaching materials of the colonial period national events get the "very feasible" category for use by students. The data are grouped as follows.

Table 7. Limited and Field Trial Data Results

NO	ASPECTS	Limited Category Trial (7 students)	Field Trial (25 students)	CATEGORIES
1.	Presentation	81.78%	84%	Very feasible
			82.8 %	**Very Eligible**

3.4 Discussion

From the results obtained Based on table 3, the percentage questionnaire. Aspects of product presentation assessment obtained an average value of 80%. It was included in the "adequate" category from the results of the calculation of the validity obtained from filling in by media experts, which include content suitability, display suitability, and device engineering in a program that is presented systematically. Regarding content suitability, the score is 80% in the "very feasible" category. Overall, the total average value obtained by media experts is 77.33%, with the category of "appropriate" being used.

From the results obtained based on table 4, the percentage of questionnaires for each aspect, the aspect of the assessment of the presentation of the material obtained an average value of 91.66% correct category of the entire validation obtained from filling in the material experts, the content of the material, the feasibility of presenting the material, the material displayed is already complete. Regarding the feasibility of the material obtained, a score of 95% is easy for students to understand. Overall, the average percentage value obtained by material experts is 91.66%, with the "very feasible" category used.

From the results obtained based on table 5 percentage questionnaires from each aspect of education, the aspect of assessing the suitability of the content obtained an average value of 85.71% in the "very feasible" category of the entire validation obtained from the teacher's filling which includes the suitability of the content of the material presented.

The supporting factors in this study are the validators. These experts always respond well. When the researchers make observations in elementary schools (SD), namely after school holidays, the inhibiting factor in this study is that it takes a long time to make video media animation. With this animated video learning media, students can repeat the parts that are not understood by themselves so that wherever they are, they can keep repeating what they have learned.

IV. Conclusion

The researcher of this animated video learning media, in social studies learning themed national events during the colonial period, fifth-grade elementary school (SD), has completed the discussion based on the research results. Based on the data from the research conducted, it can be concluded that the animated video media in social studies learning with the theme of national events during the colonial period for fifth-grade elementary schools is "very feasible" to be used in the learning process and as an innovation in social studies learning media at the elementary school level (SD). The learning media for animated videos of national events during the colonial period for social studies subjects for grade V elementary schools is straightforward to use by students and educators in elementary schools (SD) through animated learning videos that are widely available on social media such as Instagram, YouTube, etc.

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