Developing Social Science Learning Videos in Elementary Schools during Covid-19 Pandemic

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Abstrak

Ilmu Pengetahuan Sosial merupakan salah satu dari mata pelajaran penting yang terdapat di sekolah dasar dikarenakan masih banyak siswa yang cenderung belum memahami penjelasan dari guru Pengembangan ini bertujuan untuk menghasilkan suatu produk media video pembelajaran yang valid dan efektif sebagai salah satu sumber belajar untuk pembelajaran IPS di kelas V SD. Pengembangan media video pembelajaran ini menggunakan model ADDIE yang mempunyai 6 tahapan yaitu: (1) analisis, (2) desain, (3) pengembangan (4) implementasi, (5) evaluasi. Subyek dari pengembangan media video pembelajaran ini adalah siswa kelas V SDN Asemrowo II. Pengembangan media video ini dinyatakan valid digunakan dalam pembelajaran IPS kelas V. Hal ini diperoleh dari nilai hasil validasi ahli media sebesar 91,45%, ahli materi sebesar 92,34%, tes siswa sebesar 90,50%. Setelah dilakukan uji para ahli kemudian dilakukan *post test ke siswa* yang bertujuan untuk mengetahui keefektifan penggunaan media video pembelajaran ini. Hasil tes yang dalam penggunaan media video pembelajaran ini memperoleh nilai rata-rata 90,75% yang menunjukkan bahwa para siswa berhasil memperoleh nilai di atas KKM yang ditetapkan. Dengan demikan dapat disimpulkan bahwa pengembangan media video pembelajaran ini efektif untuk digunakan dalam proses pembelajaran.
Kata Kunci: Pengembangan media, Video pembelajaran, IPS.

Abstract

Social Science is an important subject in elementary school because many students are unable to comprehend the teacher's explanation. Developing valid and effective video learning media as a learning resource for social studies learning in fifth graders of elementary school is needed, especially in online learning. This study used the ADDIE model, which has five stages: (1) Analysis, (2) Design, (3) Development, (4) Implementation, and (5) Evaluation. The subjects were 25 fifth graders in SDN Banyu Urip IX Surabaya. From validation results of media experts, material experts, and students' test results, video learning media is declared valid for social studies learning in the fifth grade. The result of the validation media were 91.45% for media experts, 92.34% from material experts, and 90, 50% for student tests. Then, the experts tested the effectiveness of using this video learning media. Test results show that students have achieved grades above the specified minimum achievement score with an average score of 90.75%. Thus, it can be concluded that video learning media is effective for learning.
Keywords: media development, video learning, social studies.

INTRODUCTION

Covid-19 has spread worldwide, including in Indonesia. all activities in a wide range of industries have to be stopped for nearly a month (lockdown) due to the pandemic (WHO, 2021). The education sector still attempts to improve by preparing all policy instruments, facilities, and infrastructure for the new societal order that will come into the new normal. Education has a crucial role in preparing students for the challenges that society will confront in the future. In the age of society 5.0, educators must make use of technological advancements to enhance student learning and produce better future workforces (Larasati & Yuanta, 2021).

The spread of Covid-19 can be reduced through distance learning. To ensure that students have a positive learning experience during this time of emergency due to the spread of COVID, Indonesia's Minister of Education and Culture issued Letter No. 4 of 2020 on March 24, 2020, explaining that the learning process is carried out at home via online/distance learning (Astini, 2020). Face-to-face learning, during the pandemic, may also be done online using various types of digital application platforms, such as zoom and google meet (Abyan Rofiyadi & Lestari Handayani, 2021). Teachers, as educators with duties and obligations for teaching at school, have been forced to be more creative and innovative in selecting the appropriate learning material with the implementation of distance learning (online) in mid-March 2020. The interaction of the teaching and learning processes can be assisted by the role of learning media as a teaching aid and learning media.

Learning media is a learning tool or resource that can assist a teacher in communicating with students. The existence of learning material can help the application of online teaching and the learning process. Learning media in the learning process must also be planned and arranged systematically so that learning media may be used effectively, especially during a pandemic where learning is done online. Learning media is something that educators use to provide information to students to motivate them and facilitate teaching and learning interactions (Tofano, 2018).

One of the most widely used and readily available forms of information and communication is video. Teachers must be able to use information and communication technology (ICT) to create learning material, given that so much of today's education takes place online. Information and communication technology (ICT) teachers must be able to use ICT to create learning experiences that are both creative and innovative (Maryanti & Kurniawan, 2017). When it comes to developing educational media, learning videos are a great option. Audio and visual elements are combined in the video to create a dynamic and interesting experience. It is also possible to deliver a message from one person to another through a succession of images in the form of a movie. As of Alfianti, A., Taufik & Hakim (2020)

By combining these two components, students can receive, comprehend, and recall learning messages. The purpose of video media is to (1) clarify the presentation of messages so that they are not too long, (2) overcome the limitations of space, time, and sensory power, and (3) overcome the passive nature of students through the use of appropriate and varied educational media (Sadiman, 2011). Video is a digital media that combines audio and visual advancements to create dynamic and captivating impressions (Arif, 2017). Audio-visual media, namely media that depend on the senses of hearing and sight, can support learning interactions using video media.

Teachers and students can get benefit from the use of appropriate learning media. During the Covid-19 pandemic, teachers must be able to create and utilize new and innovative media and take advantage of learning media to educate effectively. Social studies are one of the courses taught in elementary schools. Social Sciences is one of the important subjects in elementary schools (Yuanta, 2019). According to the International Society for Social Sciences (IPS), "social sciences" is not just one discipline but a combination of various disciplines. The four aspects of "social studies" include "individual, social and time and place aspects," according to the International Society for Social Sciences (IPS) (Musyadat, 2017).

Teachers in social studies are expected to help students develop critical and creative thinking skills. However, delivering social studies learning materials to students is often complex in daily learning. One of the reasons is the use of ineffective teaching methods and media. Teachers' teaching methods still focus on lectures, textbooks, and worksheets delivered to students via group chats in fifth graders of SDN Banyu Urip IX Surabaya.

The same cases had been found by researchers in previous studies (Riyanto, M., Jamaluddin & Pamungkas, 2019). In social studies classes at SDN Panancangan 2, Cipocok Jaya District, Serang City, the usage of learning material was determined to be neglected based on observations made during class. Teachers rarely use LCD projectors; when they do, they only use them to display images and powerpoints. This shows that teachers did not maximally use the LCD projector. Students' engagement in social studies lessons suffers because of a lack of exposure to various teaching methods (Riyanto, M., Jamaluddin & Pamungkas, 2019).

Based on this background, researchers are encouraged to investigate the development of social studies learning video media that is useful in the era of the covid-19 pandemic. The problem in this study is whether the development of elementary social studies learning video media is valid and effective for use in fifth grade on social studies learning during the covid-19 pandemic. This media development aims to provide a video learning media product that is valid and effective as a learning resource for fifth graders on social studies during the covid-19 pandemic. Meanwhile, this research is beneficial because it acts as a video media for learning social studies themes for the fifth-grade elementary school during the covid-19 pandemic. 1) The geographical conditions of Indonesia as a Maritime Country can help students become more engaged in the social studies learning process by developing social media learning media, 2) Using video media, students can study independently or independently, 3) products in the form of social studies learning video media containing material on the Geographical Conditions of Indonesia as a Maritime Country for fifth-grade elementary school students, 4) the development of this video media was made using the steps of the ADDIE development model procedure.

RESEARCH METHOD

The ADDIE model is used in this study which Reiser and Mollendas developed in the 1990s, to serve as a guide in developing training program tools and infrastructure that are efficient, dynamic, and supports the performance of the training itself. The research and development method is used to develop exclusive products and test their effectiveness (Ninawati, M., Burhendi & Wulandari, 2021). In general, research and development aim to develop a product, test its effectiveness, and make it available to the entire community.

The stages in ADDIE are as follows: Analysis (analysis), Design (design), Development (development), Implementation (implementation), and Evaluation (evaluation). The advantage of this model is that it can be seen from its systematic working procedure, namely that every step that will be followed always refers to the previous step that has been improved so that it is hoped that an effective product can be obtained, the ADDIE development model consists of five main stages, shown in Chart 1 (Suryani, 2018).
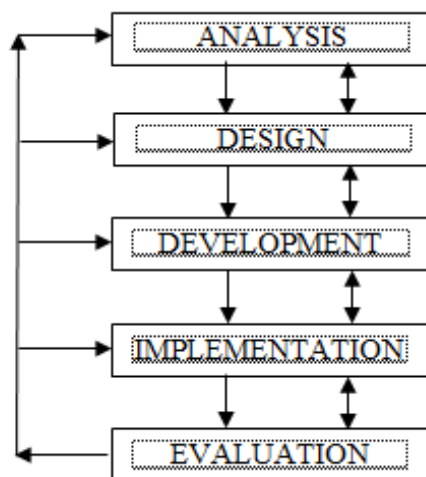
Chart 1. Model of ADDIE

The ADDIE development model is conducted in the following phases: (1) Analysis, which involves finding the reasons for current cases and then analyzing them to discover the best solution. (2) Design includes combining and creating examples to be formed, assembling a description of product objectives, and selecting to use the expected media elements' goals. In this scenario, you must choose the technique and media used and consider other things in this design. (3) Development includes products being developed as expected and can be accomplished at this level before implementation. (4) Implementation includes the use of the products that have been developed for field trials while maintaining environmental needs. (5) Evaluation consists of improving or revising products that have been tested by users (Fitriyah, I., Wiyokusumo & Leksono, 2021).

A percentage was chosen as the method for the analysis of the data for the media experts, the material experts, and the students who responded to the questionnaire. The following formula was used to determine whether or not it would be possible to use various forms of educational media:

$$P = \frac{\Sigma x}{\Sigma xi} \times 100\%$$

Description
P   : percentage
Σx   : total number of respondents' answers
Σxi   : total value of all items
100   : constant number (Arikunto Suharsimi, 2019)

Meanwhile, when adding up each item in the questionnaire, the researcher determines the assessment: answer A score = 4, B score = 3, C score = 2, and D score = 1.

Table 1
Eligibility level criteria (modified by Sugiono 2015)

Category	Presentage	Validity Level
A = 4	80% - 100%	Valid/decent
B = 3	60% - 79%	Valid enough/decent enough
C = 2	50% - 59%	Invalid/less valid
D = 1	0% - 49%	Invalid/invalid

Pre-test and post-test data were calculated to compare the score before and after using learning video media. The formula used to calculate the results of the pre-test and post-test based on the Minimum Completeness Criteria (KKM) is as follows:
Calculating the effectiveness of developing learning video media.

$$P = \frac{\Sigma d}{\Sigma X} X 100\%$$

Description

P   : the percentage being searched

Σd : the number of differences in learning outcomes test

ΣX : number of learning outcomes tests (scores after using the media)

100%   : constant number according to (Sudjana, 2005)

Video Learning media are said to be effective if there is a significant increase in learning outcomes between before and after using the media and the percentage of students who meet minimum achievement scores after using the media increases more. This device is ineffective if there is no increase in learning outcomes, and the percentage of students who meet minimum achievement scores after using the media does not increase, decrease or be the same as the previous video learning media device.

RESEARCH RESULTS AND DISCUSSION

Using the ADDIE model, the researchers developed this learning media titled "Developing Social Science Learning Videos for Elementary Schools during Covid-19 Pandemic". This development has resulted in Social Science Learning Videos.

1. Analysis

The analysis stage is the first stage of observing and analyzing problems in the field. The observation was conducted for fifth graders at SDN Banyu Urip IX Surabaya. Learning methods such as lectures, book files, and worksheets, and giving assignments sent through the group Chat, were some of the things that led to problems throughout the process of online learning by the teacher. Teachers do not use current school facilities and do not employ media to help the teaching and learning process to create a practical and enjoyable learning environment. Teachers still use the teacher-centered learning model, and the lack of variation in learning makes students lazy, uninterested, and not actively participating in the learning process in the classroom. It is necessary to develop media during the learning process to make it more diversified and less dull. The media is implemented in learning video media that includes text, graphics, audio, and animation. The availability of learning video media can help teachers communicate material more effectively.

2. Design

The design stage is the stage for designing the research. In this stage, product designs are made and developed in the form of learning video media adapted to social studies subjects on Indonesia's Geographical Condition as a Maritime Country for elementary school fifth graders. The video product design draft includes:
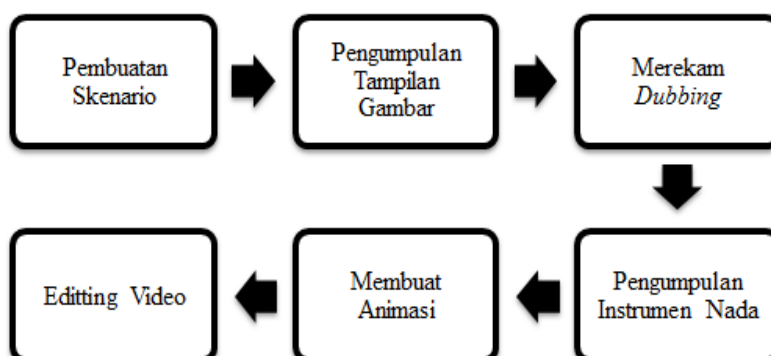

Chart 2. designing the video

A questionnaire is an instrument used to measure the feasibility and efficacy of video learning platforms for social studies. Experts in the media, specialists in the field, and audience members all received questionnaires (students) (Salsabila & Syaban, 2022). Students were given pre-test and post-test to evaluate the efficacy of the media tool implemented. An online test was administered using Google Form to collect data. The test, which included both a pre-test and a post-test, was administered online. Learning in the classroom takes place online through the use of Google Meet.

3. Development

At this development stage, the instructional video media that has been designed is produced. Media experts carry out video media validation with expertise in learning videos. Meanwhile, material experts are carried out by material experts, namely classroom teachers who know about teaching social studies whose minimum education level is undergraduate.

After that, a validity test was conducted to see the feasibility and effectiveness of the learning video media. After developing video media, the next step is to try it out through 2 stages, namely validation trials, and product trials. Validation trials were carried out by media experts and content/material experts, especially social studies subjects. This development video product will be tested, and some suggestions must be improved to produce a very valid product by media experts and content experts. This trial was conducted at SDN Banyu Urip IX Surabaya with 25 students. The test for student trials was a post-test of learning outcomes using video media in social studies learning.

a. Data of media expert

Table 2
Data of Media Expert

No.	Aspect	Answers		ΣXi	%
		X1	X2		
1.	The suitability in selecting learning video media	4	4	8	100%
2.	The suitability of this video media to achieve learning objectives	4	4	8	100%
3.	The level of interest in presenting video/animation images	3	3	8	75%
4.	Clarity of video images in learning videos	3	3	8	75%
5.	Clarity of text in learning videos	4	4	8	100%
6.	Clarity of narrative in learning videos	4	4	8	100%
7.	The suitability of pictures and narratives for learning objectives	3	4	8	87,5%
8.	Use of color	4	4	8	100%
9.	Clarity of picture/animation messages	3	3	8	75%
10.	Suitability of using transition effects	4	4	8	100%
	Total	36	37	80	91,25%

b. Data of material expert

Table 3
Data of Material Expert

No.	Aspect	Answer	ΣXi	%
1.	Clarity of material description	4	4	100%
2.	Completeness of material description	4	4	100%
3.	Learning video suitability	4	4	100%
4.	Clarity of video images and narration	4	4	100%
5.	The speed of students' understanding the material	3	4	75%
6.	Learning efficiency	4	4	100%
7.	The accuracy of using learning videos in science learning	4	4	100%
8.	The tendency of students to learn	4	4	100%

9.	The attractiveness of the composition of the content/material consisting of narration, animation/learning videos	4	4	100%
10.	Text clarity	4	4	100%
	Total	**39**	**40**	**97,5%**

Social studies learning video media is one way to solve problems that occur in schools. After the video media is produced, it is tested by media experts and content/material experts. The results of the development of social studies learning video media for fifth graders at SDN Banyu Urip IX Surabaya were categorized as valid. It is looked from the results of the trial percentage of media experts of 91.25%, and the percentage of content experts was 97.5%. From the results of the percentage of experts, the social studies learning video media developed is very valid to be used in the social studies learning process.

4. Implementation

The implementation stage is implementing video media products made and validated by media and material experts. This stage realizes analysis, design, and development into a tangible form of a learning process assisted by video learning media. Then, the learning video media that has been repaired and declared valid can be tested on fifth-graders of elementary school at SDN Banyu Urip IX Surabaya. This step includes the analysis, design, and development of a learning process supported by video learning media into a concrete form.

The social studies learning video media was then tested in fifth-grade elementary school. The test results for students are 90.50%. From the results of the student presentations, the social studies learning media developed were very valid to be used in the social studies learning process in the fifth class. Although the development of social studies learning video media was declared valid to be used in social studies learning, several aspects had to be revised following suggestions given by experts at the time of validation (Pakpahan & Fitriani, 2020).

After completing the validation trials to experts and student trials, then giving final tests to students, this test was conducted to determine the effectiveness of using social studies learning video media. The test results from 25 students obtained an average score of 90.75%. From the average value obtained results, it can be concluded that the students have met the specified minimum achievement score. Thus, the development of social studies learning video media is declared to be effectively used in the social studies learning process (Wahyuningtyas & Sulasmono, 2020).

5. Evaluation

At this stage, an evaluation was used to measure the extent to which the efficiency and effectiveness of the media that have been used. This means that interviews will be conducted during the evaluation process to find out the problems that arise, then questionnaires, pre-test, and post-test. This activity is expected to see students' ability to master the material and student learning outcomes before and after using learning media. If, at this evaluation stage, there are still shortcomings that cause this media to be invalid/feasible to use in the teaching and learning process, improve the media until the media is valid/feasible to use for the teaching and learning process.

This evaluation was carried out to review the design of video learning media development. The questionnaire or instrument will be distributed to material experts, media experts, and audiences (students) at this stage. The evaluation stage also includes product trials intended to collect data that can be used to prove the effectiveness and attractiveness of this learning media.

CONCLUSIONS AND SUGGESTIONS

Learning media is very helpful for teachers in delivering material in the learning process because the role of learning media is as a communication bridge between teachers and students. Thus, learning media should be

used during the learning process in the classroom. Developers make products in the form of social studies learning video media as a strategy for delivering learning messages.

The advice the developer gives to the next developer is that the validation test process to experts should be carried out more than once so that the resulting product is exciting both in terms of appearance and the material in it. In addition, the resulting product is also more creative and interesting so that there is no saturation of students in the learning process, especially in social studies learning.

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