

# Development of Interactive Learning Videos on the Theme of Caring for Living Creatures for Grade IV Elementary School Students

Ainurh Ihza Gharin Hunafa<sup>1</sup>, Sulthon Masyhud<sup>2</sup>, Fitria Kurniasih<sup>3</sup>

Elementary School Teacher Education, University of Jember, Kalimantan Street 37 Jember 68121 e-mail :  
[ainurihza@gmail.com](mailto:ainurihza@gmail.com)<sup>1</sup>, [msulthon.fkip@unej.ac.id](mailto:msulthon.fkip@unej.ac.id)<sup>2</sup>, [fitria.fkip@unej.ac.id](mailto:fitria.fkip@unej.ac.id)<sup>3</sup>,

**Abstract:** This study aims to describe the process and development of interactive learning videos with the theme of caring for living things in the fourth grade of elementary school, especially in social studies material about the benefits of animals for society. This type of research is development research that uses the Borg and Gall development method. The subjects of this study were fourth grade students of SDN Dabasah 1 Bondowoso. The interactive learning video development procedure consists of 8 stages, namely: 1) preliminary research, (2) product development planning, (3) initial product design development, (4) product design validation, (5) product design revision, (6) test user trials, (7) product design revisions, (8) effectiveness trials. Data analysis was carried out by means of descriptive data analysis. The results obtained, 1) the average value of expert validation gets a percentage of 94.7% so that it is included in the "very feasible" category, 2) the t-count value is greater than t-table (3.950 > 2.004), 3) The t-count value is more greater than t table (3.950 > 2.004), the results of the calculation of the relative effectiveness test are 66.74% with a moderate effectiveness category, and 4) the response value is 84.28%. So it can be said that the development of interactive learning videos is very effective and practical to use in learning with animal benefits for the community.

**Keywords:** learning media, interactive videos.

## 1. INTRODUCTION

The learning process in the classroom requires direct interaction between teachers and students so that learning goes well. The interactions that occur greatly affect student learning outcomes. However, in March 2020 there was a disaster that affected most countries including Indonesia, namely the presence of the COVID-19 virus which is very dangerous for humans because it can make people affected by the COVID-19 virus die. This prompted the government to take action to stop the spread of the COVID-19 virus. The step taken by the government is the issuance of Minister of Health Regulation No. 9 of 2020 concerning Large-Scale Social Restrictions (PSBB). Large-Scale Social Restriction is to cancel or reduce direct interaction in some activities. Minister of Health Regulation Number 9 of 2020 concerning Large-Scale Social Restrictions (PSBB).

The COVID-19 outbreak has hampered all types of activities, one of which is teaching and learning activities. The government makes regulations to conduct online learning. Online learning is learning by distance methods without meeting in person, online learning is done through media to convey information, in the form of the internet and other supporting tools such as computers and mobile phones (Putria et al., 2020). Online learning is very different from face-to-face or face-to-face learning. In implementing online learning, you must pay attention to good delivery methods so that students can understand so that learning objectives can be achieved.

Learning using the online system does not always run smoothly, one of which occurred at SDN Dabasah 1

Bondowoso. Based on the results of interviews conducted on June 5, 2021 to the homeroom teacher for grade IV. There are several problems when implementing an online learning system. First, the teacher only uses whatsapp to share materials and assignments. Second, the learning process tends to be boring, because there is no direct interaction and there is too much reading. This makes some students have no interest in learning and tend to be lazy to read it. Whereas in this material students are required to be able to identify the characteristics of space and the use of natural resources for the welfare of the community from the city/district level to the provincial level and be able to explain the importance of balancing and preserving natural resources in their environment. Therefore, it is necessary to support learning which can be combined with an online learning system.

Based on this, creative initiatives and ideas are needed in the form of developing learning media. According to Sadiman (2007:6) the media is an intermediary or messenger from the sender to the recipient. Learning media must be relevant to the material to be conveyed by the teacher. Good media are media that are able to attract students' interest in learning and are also easy to understand by students.

Interactive learning media is an alternative that can be used to overcome problems that occur due to the application of learning using an online system. Seels and Glasgow (in Arsyad, 2006:36) interactive learning media is a teaching delivery system that presents material in video to students who not only hear and see video and sound, but also provide an active response. The more senses involved in the process

of understanding the learning material, the more information will be obtained. In addition, learning media supported by audio and visual media can make online learning more memorable and easier for students to understand. Teachers can make learning videos using the adobe premiere pro application.

adobe premiere pro is a video editing application that is commonly used by editors to do video editing with various facilities in the application. The Adobe Premiere Pro application has 45 effects for video and 12 effects for audio that can be used to change or change the appearance and can also create video and audio animations. Of the 45 video effects available on Adobe Premiere Pro, there are 3 effects that can only be used with the help of graphics cards such as NVIDIA or AMD.

The diversity of living things in my environment is one of the materials in class IV thematic learning which is quite interesting to be developed into an adobe premiere pro application-based learning media. Because based on observations that have been made on various kinds of previous learning videos, especially the material on the diversity of living things in my environment. The learning videos that are circulating are good, but they need to be developed again, because some of the text fonts are too small, the images are presented in animated form, and there are no subtitles.

Based on the explanation above, the research focuses on the development of interactive learning videos. Therefore, a research was conducted with the title "Development of interactive learning videos on the theme of caring for living things for grade IV SD".

## 2. RESEARCH METHODS

This research uses the Borg and Gall development method. This development method consists of ten stages of development. Of the ten steps that exist, only the eighth stage is used to test the effectiveness of the study. Because at stage eight of the eight researchers can conclude the effectiveness and suitability of the resulting product. Masyhud (2016: 258) states that development research for undergraduate students can end up to step 8 and end with an accountability report. The research subjects used were students of class IVB and IVC which each class consisted of 28 students. This research produces a product in the form of interactive learning videos on the theme of caring for living things for the fourth grade of elementary school, especially on social studies content on the benefits of animals for the community.

## 3. RESULTS AND DISCUSSIONS

This research is a type of development research that uses the R&D model by Borg and Gall. The interactive learning video development procedure consists of 8 stages, namely: 1) preliminary research, (2) product development planning, (3) initial product design development, (4) product design validation, (5) product design revision, (6) trial users, (7) product design revision, (8) effectiveness

testing.

### 3.1 Preliminary research

In this step, what is done is to find information and analyze the data obtained by conducting interviews with fourth grade teachers and analyzing the learning media that have been circulating. From the analysis conducted, there are several problems and potentials that exist in learning activities. First, the learning process is carried out online, the teacher gives materials and assignments to students via whatsapp, second, based on the results of interviews with fourth grade teachers, it can be seen that new innovations are needed in the delivery and presentation of material. So that learning does not occur monotonously, thirdly, during the learning process it tends to be boring, because it is less interesting, and there are too many readings. So that it makes some students have no interest in learning and sometimes tend to be lazy to read it, fourth, based on observations about pre-existing media, especially the benefits of animals for the community. It can be seen that the learning videos that are circulating are good, but there are some shortcomings, namely, there are no subtitles, the images are presented in animated form, the writing font is too small. So there is a need for efforts to develop learning media to make it better.

### 3.2 Product development planning

In the planning and product development stages, it is carried out in accordance with the various information that has been obtained and compiled in the form of a research development proposal. The research development proposal that is prepared contains the following: (a) the formulation of the title, (b) the formulation of the research problem, (c) the formulation of the objectives and benefits of the research, (d) literature review, (e) the development methods and procedures carried out, as well as the preparation of various instruments such as questions, questionnaires, and preparing pictures or sketches to be assembled into videos as well as compiling schemes in making planned learning media.

### 3.3 Initial product design development

This stage enters the initial activity of making the product. The things that are done include preparation of applications, preparation of image materials and video content, then assembling the videos into a unified and systematic whole. The application used is Adobe Premiere Pro, where with this application users can arrange images and text into an attractive video. The video format produced when saving at the final stage of video creation is MP4 and can be played in all existing video applications.

### 3.4 Product design validation

Product validation is carried out by a media expert and education practitioner. From the assessment given by the validator, the valrho value is 94.7. This value was consulted against the product validity criteria table and was categorized as very feasible to be tested at a later stage because it was in the range of scores of 81 SP 100.

Therefore, the learning media developed was declared very feasible to be tested.

### 3.5 Product design revision

Based on the validator's assessment, there are several parts that need to be revised, including adding learning objectives, mentioning themes and sub-themes, enlarged teacher objects, clarified audio, given the UNEJ logo, and correcting typos.

### 3.6 User trials

This trial was conducted with the number of respondents as many as 28 students. According to Masyhud (2016, 249-250) if the results of the trial use by most students get the answer "YES" with a minimum number of 80% on each answer point, the product can be tested in a trial of effectiveness. Meanwhile, if the answer "YES" is less than 80%, it is necessary to revise. From the results of the analysis, it can be seen that the points for number 2 and number 6, students who answered "YES" were less than 80%. So at that point, it needs to be revised.

### 3.7 Product design revisions

Product design revisions are carried out based on feedback obtained from the results of testing the use of products that have been used. The point that requires revision is point 2, by correcting a typo. In addition, revisions were also made to point number 6, namely improving the audio, in the hope of clarifying the storyline and the material displayed in the learning video, thus making it easier for students to accept and understand the benefits of animals for the community.

### 3.8 Effectiveness trials

The process of testing the effectiveness of the learning video was carried out using the Independent Sample T Test, the Relative Effectiveness Test and Student Responses to interactive learning videos.

#### 1. Independent sample T-Test Results

In this study, to determine the effectiveness of interactive learning videos, a sample t-test was carried out using the pretest posttest type method. The trial was given to 56 students who came from the IVB class as the experimental class and IVC as the control class. Class IVB is given learning using a new product, namely interactive learning videos. While the IVC class was given an old product, namely the student book theme 3. The data was then analyzed using SPSS. The results of the calculation of the t test using SPSS can be seen in the following table.

Based on the results of the t-test analysis in the table, the t-count is 3.950. The t-count results were then consulted with the critical t-table (t-table) at a significance level of 0.05. The value of t table for a significance level of 0.05 with a df of 54 is 2.004. These results indicate that the value of t count is greater than t table (3.950 > 2.004).

#### 2. Relative Effectiveness Test Results

The relative effectiveness test aims to find out how much the level of effectiveness is compared to the previous product. The relative effectiveness can be seen by analyzing the results of the average pre-test and posttest scores using

the following relative effectiveness formula.

$$ER = \frac{MX_1 - MX_2}{\frac{MX_1 + MX_2}{2}} \times 100\%$$

$$ER = \frac{11,07 - 5,53}{\frac{11,07 + 5,53}{2}} \times 100\%$$

$$ER = \frac{5,54}{8,3} \times 100\%$$

$$ER = 66,74 \% \text{ (Moderate Effectiveness)}$$

Information :

ER : The relative effectiveness of the experimental group treatment compared to the control group treatment.

MX1 : Average different control class.

MX2 : The average difference in the experimental class

The results of the calculation of the relative effectiveness test obtained an ER of 66.74% with a moderate effectiveness category. These results indicate that learning using interactive video is more effective than the learning outcomes of the control class which only uses the student book theme 3 .

#### 3. Student Response Test Results

The effectiveness of interactive learning video media can also be seen from the responses of the experimental class students by distributing product assessment questionnaires after participating in the lesson. The product assessment questionnaire consists of 12 questions with the lowest score per question item 1 and the highest being 5. The average results of the student response effectiveness test can be determined using the following formula.

$$Sas = \left( \frac{st}{smt} \times 100\% \right)$$

$$Sas = \left( \frac{1416}{1680} \times 100\% \right)$$

$$Sas = 84,28$$

Information :

Sas = Student questionnaire scores

St = Score achieved

Smt = Maximum score that can be achieved

Based on the questionnaire data and the results of the calculation of student responses, the score was 84.28% and was included in the very effective category.

#### 4. CONCLUSION

The process of developing learning videos based on Adobe Premiere pro material on animal benefits for the community has been carried out using the Borg and Gall research model development stage which consists of 8 stages. product validation results obtained an average validity of 94.7. The value is consulted against the product validity criteria table and is in the very feasible or valid category.

The effectiveness of interactive learning video development products in supporting learning can be seen from the results of the validation and effectiveness of interactive learning videos. The results of product validation obtained a score of 94.7% with a very decent category. This shows that interactive learning videos are valid and feasible to be used in learning activities. While student learning outcomes in the experimental class showed a value of 66.74% high effectiveness. In addition, the test of the effectiveness of the student's response obtained a score of 84.24% with a very effective category. It can be assumed that the product that has been developed can be said to be effective and feasible to use in supporting learning.

#### 5. REFERENCES

- [1] Arsyad, A. 2006. *Media Pembelajaran*. Jakarta: PT Raja Grafindo Persada.
- [2] Masyhud, M. S. 2016. *Metode Penelitian Pendidikan*. Jember: Lembaga Pengembangan Manajemen dan Profesi Kependidikan.
- [3] Putria, H., L. H. Maula, dan D. A. Uswatun. 2020. Analisis proses pembelajaran dalam jaringan (DARING) masa pandemic COVID-19 pada guru sekolah dasar. *Jurnal Basicedu*. 4(4): 861-872.
- [4] Sadiman, A. S., Rahardjo, R., Haryono, A., dan Rahardjito. 2007. *Media Pendidikan: Pengertian, Pengembangan, dan Pemanfaatannya*. Jakarta: Raja Grafindo Persada.