Development of Swimming Learning Video Media Based on Camtasia for Class XI Students at Smk 17 Parakan, Temanggung

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Abstract. This study analyzes the results of Camtasia-Based Swimming Learning Media Development for Class xi students at SMK 17 Parakan Temanggung. Products are packaged in videos, and products can be used independently using Android online by students. This learning media was developed using the Research and Development method of the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation). Applications were assessed by one material expert, one media expert, and two teachers. They administered a questionnaire to 6 students (2 high-ability students, two medium-ability students, and two low- ability students). The validity of the media expert showed that at 3.77, it could be classified as "good," 4.2 for the validation of the material expert in the "good" category, and 4.17 for the teacher's response with the "good" category and 37% for the student's response. The product can be run independently online which can be downloaded on youtube. In conclusion, the Camtasia-based swimming learning video media is feasible for student learning at the SMK level and can be implemented in large-scale trials.

Key words: learning videos; swimming; camtasia.

INTRODUCTION

Education is a conscious effort to prepare students through guidance, teaching, and or training activities for their role in the future. Education can encourage the improvement of human resources' quality that determines a nation's development (Ningsih, 2012:123). The development of the era of the revolution in science and technology (IPTEK) can be seen in education. There is always a demand to develop scientific innovations from human creativity in building new concepts, theories, and technologies (Semiawan, 2010).

The integration of technology in the world of education cannot be separated from the impact of the coronavirus pandemic (Covid-19). According to Etikasari, Puspitasari, Kurniasari, and Perdanasari (2020), Novel Coronavirus (Covid-19) is a disease with a very fasttransmission rate. According to Mustika Ningrum (2020), the impact of Covid-19 on education

in Indonesia is that learning activities are abolished in schools and changed to online learning activities. Therefore, with the Covid-19 pandemic, it is hoped that teachers can develop a learning media so that learning activities continue to run optimally.

An important lesson that needs to be emphasized during the Covid-19 pandemic is physical education, sports, and health. According to Erfayliana (2015), physical education, sports, and health are media to encourage physical growth, psychological development, motorskills, knowledge and reasoning, appreciation of values (attitude, mental, emotional, sportsmanship, spiritual and social), and getting used to lifestyle healthy which leads to stimulating growth and development of balanced physical and psychological qualities. Therefore, physical education, sports, and health need to be carried out by students so that theydo not contract Covid-19.

Physical education teachers, sports, and health are among the most important aspects in achieving success in constructing students to swim well (Stallman, 2017). According to Turdaliyevich (2020), sports and health physical education teachers must have sufficient abilities and skills so that swimming lessons can be conveyed to students and can meet the curriculum or goals that have been set. Besides that, swimming lessons can be used to refreshstudents because learning is not only done at the Choopankareh school (2017). Therefore, learning to swim is a physical activity and can be an activity to calm the mind.

The problem that existed during the Covid-19 pandemic was limited meetings with students, and students had to study alone at home. Furthermore,

learning sports that require good practice so that the activity does not occur injury must be emphasized. Susanto (2016: 77) states that swimming lessons that are not delivered properly will result in anatomical and physiological risks for children such as injury, drowning, and the risk of death. Submission of material in swimming learning that is wrong also causes movement errors that result in stuntedchild growth. From the statement, it is clear that swimming lessons must be carried out properly so that these things can be minimized and learning objectives will also be achieved. Therefore, teachers must have innovations in making learning media to facilitate students.

Another problem in the observations made at SMK 17 Parakan on sports and health physical education learning from the interview with the teacher was that the learning was doneonline. The teacher only gave material in the learning, and students were told to watch videoson youtube on sports material. This makes the knowledge that students get to be different because what they are looking for is from different video sources. In addition, students already have mobile phones (HP) that can play videos, and students get data packages from the government.

Learning video is multimedia which refers to computer-mediated information that is presented simultaneously on more than one media or element, including text, images, moving images/animations, hypermedia, photos, videos, or videos, the use of which does not have to be all of this. Combined (Nusir et al., 2013:306). According to Yohannes et al. (2016), learning using ICT in multimedia is more effective than learning using conventional methods. In the use of ICT by making videos, the application used to make videos is Camtasia. According to Dahtul (2013), Camtasia is a video studio that can edit, add text, record sound or presentations.Therefore Camtasia is considered suitable for making swimming videos for vocational studentsbecause it can insert writing functions as a theory and can insert swimming tutorial videos well.However, the results of Camtasia video conversion if the resolution is large, the video size alsobecomes larger.

Based on this background description, this research will examine the development of Camtasia-based learning videos in sports and health physical education subjects during the Covid-19 pandemic.

METHODS

The purpose of this study was to develop and test the feasibility of a Camtasia-based learning video with good and reliable swimming material at SMK 17 Parakan. This research isexpected to reference teachers in online learning by utilizing ICT, namely by making videos regardless of the application.

The sample in this study used a purposive sampling technique, namely the technique of taking the subject with certain considerations (Sugiyono, 2014). So that only one class was taken as the experimental class. Considering using one class because the swimming material, especially practice, has a high risk, only one class is taken.

This study uses the Research & Development (R&D) method. The model or approach to video learning media design in swimming material uses the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model. Product assessment by three media experts, education practitioners/teachers, and material experts. The data collected is product feasibility data based on expert judgments collected using a product feasibility questionnaire. Media experts assessed the product's practicality, while material experts were asked to assess the validity of the initial product. Finally, educational practitioners must assess validity and practicality. The assessment was carried out using a questionnaire to obtain qualitative data. Assessment of the product development results was analyzed by converting the data. The product is declared valid and practically determined with a minimum value in the category of good enough. The assessment of the three experts is referred to as the feasibility data for the trial. The reference for changing the score to a scale of four is shown in Table 1.

Tabel 1. Assessment Criteria (Mardapi, 2012)

Interval Score		Category
$X \geq Mi + 1.5\,SBi$	$X \geq 3.25$	Very good
$Mi + 1.5\,SBi > X \geq Mi$	$3.25 > X \geq 2.5$	Good
$Mi > X \geq Mi - 1.5\,SBi$	$2.5 > X \geq 1.75$	Pretty good
$Mi - 1.5\,SBi > X$	$1.75 > X$	Not good

Describtion:

Mi : Overall average score

SBi : The standard deviation of the overall score

X: score obtained

RESULT AND DISCUSSION

This study resulted in a product in the form of video-based learning videos on swimming

material for vocational students. This learning media consists of various forms of animation, pictures of learning materials, videos, and evaluation questions.

The learning media design that will be developed is divided into several parts, namely profiles, learning objectives, materials in swimming, practical videos in swimming, and evaluation questions. In addition, the systematics in presenting the material in this media is under the syllabus, translated into indicators.

Making this media is based on the design of making media in storyboards and flowcharts. For the review stage, the experts used a questionnaire developed by the researcher based on existing references, then discussed with the supervisor. The final stage in product development before being tested is revision. Revisions are made based on criticism and suggestions from experts. Under the title of this research, the development of this media uses the Camtasia application program. After the media is finished, it is uploaded to YouTube and can be used to reference student learning. Here are the results in developing video media.

At this stage, learning media is made, starting from typing material, practicing questions, evaluating and continuing with inserting pictures, giving animation, video, and sound. First, making learning media, namely learning videos using Camtasia, outlines the media content and the design of learning media development. By design, the development of learning videos with Camtasia contains the front page, learning objectives, materials, evaluations, and recommendations for anticipating Covid-19.This learning video is 9 minutes long, so it's not too fast and not too long for forgiving material. When starting this media, the user will first display the profile and title of this media.

For example, the start page of this learning video is presented in Figure 1.

Figure 1. Start Page of Learning Video

It can be seen in Figure 1 that the initial page already has the name of the author and the agency of the author. In the next video display, namely the opening of the previous lesson,the display is in Figure 2.
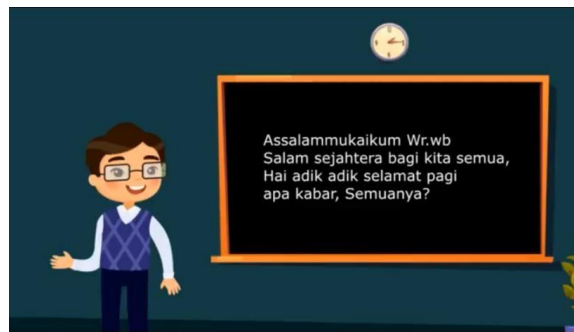

Figure 2. Opening of Learning

Furthermore, Figure 3 is part of the learning objectives presented below.
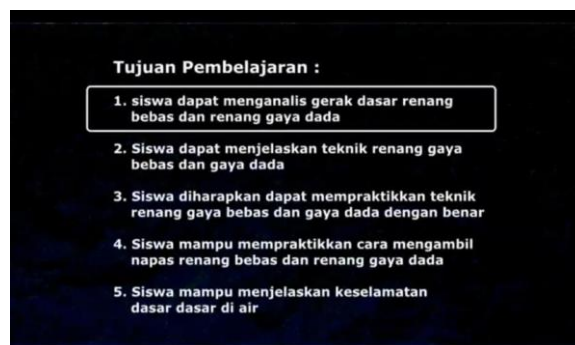

Figure 3. Learning Objectives

In Figure 3 it can be seen that the display of learning objectives in the swimming video for SMK has 5 objectives. As for Figure 4, it is learning materials.

Figure 4. Display of Learning Materials

After the display of the material is given, the next display is an evaluation, Figure 5below is an evaluation for students in the video that was developed.

Figure 5. Evaluation Display in the Video

After making the learning video complete, the media is then validated by experts who will assess the suitability of the content and the validity of the media. The experts who will become the learning media are material experts and media experts. Each expert fills out an evaluation questionnaire prepared based on aspects that have been determined and discussed with the supervisor. In addition to the questionnaire on scoring the media components, the questionnaire also provided an entry section to provide suggestions, criticisms, forms of errors, and suggestions for improvement. Based on the contents of the questionnaire, then revisions and improvements were made to the learning media.

This revision is adjusted to the input, suggestions, and criticisms given and is still adjusted to developing the learning media. Following the expert lecturer's questionnaire, this learning media material must be revised.

Media revisions are adjusted to the input, suggestions, and criticisms given and are still adjusted to developing the learning media. The media expert questionnaire contained in the appendix revealed that this learning media should be revised, among others. The expert validation data can be seen in Table 2.

Table 2. Results of the Camtasia-based Learning Video Assessment by Ahi Media

Aspect	Score Average	Criteria
Simplicity	4.3	Very Good
Cohesiveness	4	Good
Learning Interaction	3.4	Enough
Balance	3.6	Enough
Form	4.1	Good
Color	4.1	Good
Language	3.8	Good
Average	3.77	Good

Based on the results of the media expert's assessment presented in Table 2, the averagescore is 3.77 with Good criteria. Furthermore, in the comments and suggestions, the media expert wrote a revision as suggested by the media expert, then the media expert stated that thelearning video was worth testing with revisions.

Suggestions from material expert lecturers are carried out after the media developmentprocess is complete. This validation is carried out by PJOK lecturers. This validation aims to get comments and suggestions about the shortcomings of this media so that the final stage of media revision can be carried out before conducting a trial. Aspects that are evaluated mainly in terms of material include: content quality, learning quality, interaction quality, display quality.

Table 3. Material Expert Validation Results

Aspect	Score Average	Criteria
Content Quality	4.4	Very Good
Quality of learning	4.1	Good
Interaction Quality	4	Good
Display Quality	4.1	Good
Average	4.2	Good

Based on the results of the material expert's assessment presented in Table 3, the results obtained an average score of 4.2 with Good criteria. Furthermore, in the comments and suggestions, the media expert wrote a revision as suggested by the media expert, then the media expert stated that Camtasia-based learning videos were worth testing with revisions.

This media validation was carried out by 2 sports teachers at SMK 17 Parakan. The results of this validation aim to obtain input that will be used to improve the media that has been developed so that the final stage of media revision can be carried out. The data on the results of the media validation questionnaire by the teacher are presented in Table 4.

Table 4. Sports Teacher Evaluation Results

Aspec	Score Average	Criteria
Content Quality and Purpose	4	Good
Technical Quality	4.2	Good
Quality of learning	4.3	Very Good
Average	4.17	Good

Table 4 obtained an average of 4.17 with good criteria. Thus, not only the eligibilitycriteria are very good, but the lecturer also stated that Camtasia-based learning videos are eligible to be tested.

During the trial, the students were directed to learn the swimming material independently, while the researcher only had to act as a facilitator. If students have difficulty,then students are allowed to ask the researcher. Researchers conduct learning using learning media by the lesson plans that have been made. After the research lasted for four weeks, the researchers distributed media evaluation sheets and response questionnaires. They then askedstudents to fill in the available ones on the google form. After all the data was collected, the researcher then revised the final stage of learning media based on filling out the media evaluation sheet by the teacher and students. The evaluation results are used as a basis for assessing the quality or not of the learning media and testing the effectiveness of using the media; here are the results of the trials.

A small group test is a simulation conducted to determine the feasibility of the product before being used in the research class. Researchers tested Camtasia-based learning videos on six students at SMK 17 Parakan in class XII. The six students were selected by taking two students with high abilities, two students with moderate abilities, and two with low abilities. It is intended that the trial of this product is balanced and evenly distributed sothat it can be used by all students, both high and low. The following are the learning outcomes of small-scale trials, which are presented in Table 5.

Table 5. Small-Scale Trial Results

Describtion	Pretest	Posttest
Average	72	94
Lowest score/ score	68	80
Highest score/score	92	100
number of students completed	4	6
the number of students is not complete	2	0
Percentage of Completeness (%)	63%	100%

Table 5 shows an increase in learning outcomes, namely from the average value and the percentage of completeness. Camtasia-based learning videos have been successfully used in small group tests with an average increase in learning outcomes of 37%.

CONCLUSION

This research produces Camtasia-based swimming learning video media for class XI SMK students. The validity of the media expert showed that 3.77 could be classified as "good,"

4.2 for material expert validation with the "good" category and 4.17 for the teacher's responsewith the "good" category, and 37% for the student's response. Furthermore, the product can berun independently online, which can be downloaded on youtube.

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