



Development of Learning Videos Based on Constructivistic Learning Theory on the Theme of 8 Areas I Live in Grade IV Elementary School

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Abstract: The study reviews the development of learning video media based on constructivist learning theory on the theme of 8 areas where I live in the fourth grade of elementary school. The aims of this research are: (1) Knowing the feasibility of learning videos based on constructivist learning theory on the theme of the 8 areas where I live in grade IV elementary school that was developed, (2) knowing the practicality of learning videos based on constructivist learning theories on the theme 8 areas where I live in class IV school. developed base. This type of research is development research (R&D) with the ADDIE model design consisting of Analysis, Design, Develop, Implementation, and Evaluation. The trial was conducted at SDN Kledungkradenan class IV. This development research resulted: (1) the feasibility of learning videos based on constructivist learning theory got an average score of 3.59 with a very decent category, and (2) the practicality of learning videos based on constructivist learning theory got an average score of 3.75 with the category very practical. Product development in this research can be said to be feasible if it can meet two aspects, namely validity and practicality. a. Validity, whether the developed product is valid or not is obtained from the assessment of experts. The minimum level of product validity is in the range > 2.5 b. Practicality, whether or not the product developed is produced from student response questionnaires. The minimum level of practical value is in the range > 2.5.

Abstrak: Penelitian mengulas tentang pengembangan media video pembelajaran berbasis teori belajar konstruktivistik pada tema 8 daerah tempat tinggalku kelas IV sekolah dasar. Tujuan dari penelitian ini yaitu: (1) Mengetahui kelayakan video pembelajaran berbasis teori belajar konstruktivistik pada tema 8 daerah tempat tinggalku kelas IV sekolah dasar yang dikembangkan, (2) mengetahui kepraktisan video pembelajaran berbasis teori belajar konstruktivistik pada tema 8 daerah tempat tinggalku kelas IV sekolah dasar yang dikembangkan. Jenis penelitian ini merupakan penelitian pengembangan (R&D) dengan desain model ADDIE yang terdiri dari *Analysis, Design, Develop, Implementation, and Evaluation*. Uji coba dilakukan di SDN Kledungkradenan kelas IV. Penelitian pengembangan ini menghasilkan: (1) kelayakan video pembelajaran berbasis teori belajar konstruktivistik mendapat nilai rata-rata sebesar 3,59 dengan kategori sangat layak, (2) kepraktisan video pembelajaran berbasis teori belajar konstruktivistik memperoleh nilai rata-rata sebesar 3,75 dengan kategori sangat praktis. Produk pengembangan dalam penelitian ini dapat dikatakan layak apabila dapat memenuhi dua aspek yaitu kevalidan dan kepraktisan. a. Kevalidan, valid tidaknya produk yang dikembangkan diperoleh dari penilaian para ahli. Tingkat minimal kevalidan produk terdapat pada rentang > 2,5 b. Kepraktisan, praktis tidaknya produk yang dikembangkan dihasilkan dari angket respon peserta didik. Tingkat minimal nilai praktis berada pada rentang > 2,5. Jadi dapat disimpulkan bahwa media video pembelajaran berbasis teori belajar konstruktivistik pada tema 8 daerah tempat tinggalku kelas IV sekolah dasar layak dan praktis digunakan sebagai media pembelajaran karena nilai rata-rata >2,5.

A. Introduction

Learning is a planned activity or process of interaction between students and educators and learning resources in a learning environment. Learning itself is an activity that a person does to learn. Learning is a change in the behavior of students who do not know to know due to experience and practice (Dangnga & Muis, 2015). Learning activities can be said to be ideal if there is the interaction between students and educators, in which case students play an active role in learning activities while educators only act as facilitators. Efforts to foster interaction and the active role of students can use an approach. One approach that can be used is to use constructivist learning theory. Constructivist learning theory is one approach to learning based on the results of mental construction, in which the learning process will be influenced by the beliefs and attitudes of students (Sugrah, 2019). Learning theory is used a learning that emphasizes understanding from within students to grow an idea to solve problems.

According to Sudarsana (2018), Constructivism is when students must find themselves and develop complex information in other situations and if desired, the information becomes their own. According to Suparno (2018), everyone builds their knowledge according to their itiecitiesowledge is not someone a process that must be developed continuously by a person's activity so that knowledge will develop. According to Wardoyo (2015), the constructivetivet approach has the characteristics of independent learning, critical thinking, dialogue, motivation, language, feedback, explanation, asking, learning through teaching, contextualization, experimentation, anand problemolvinggg in the real world. According to Mustafa & Roesdiyanto (2021), the purpose of constructivist learning is to help students build new knowledge that must be possessed related to the learning context. According to Syahrul (2019), Constructivistic Learning has principles including a) students actively build their knowledge, b) students get pressure in the learning process, c) teaching is providing knowledge and helping students in learning d) the learning process is more emphasized than the final result, e) the curriculum demands the activeness of students in learning, f) educators are providers of knowledge. Learning using constructivist learning theory can be applied to learning at the elementary school level which uses thematic learning. Thematic learning is learning whose implementation applies the principle of integrated learning or uses a theme that consists of several lesson content in one face-to-face (Akrim et al, 2018). Thematic learning is a learning pattern that must be demanded based on the 2013 curriculum.

The importance of social studies learning is because social studies are very dynamic learning where social studies emphasize studying the state of society whose development is very fast (Pernantah, 2019). According to Syahrudin and Mutiani (2020), the achievement of a lesson must involve an active role between educators and students, because one of the principles of learning is activeness. One form of effort in increasing the activity and interest of students in learning activities, especially in social studies subjects, is to use animated videos. According to Djamarah & Azwan (2010) that "media" comes from the Latin "medium" which means "intermediary" or "introduction". According to Rohani (2019),

Learning media is a means of channeling or carrying messages that can be used to assist learning.

According to Suryani (2018), Learning media is a tool to help students understand a learning material to make it easier for students to receive all the information conveyed by educators so that the desired learning objectives are achieved. According to Arsyad & Azhary (2019), Learning media is divided into two categories, namely the latest media and traditional media. Animated video is one of the learning media in the form of visualization of images that move at a certain speed (Afridzal, 2018).

According to Maulannisa (2020), Thematic learning is a learning pattern that must be demanded based on the 2013 curriculum. One of the thematic learning content is social studies subjects. According to Parni (2017), Social Studies is a subject that has an important role in life because individuals have social insight, social sensitivity, and social skills. According to Wahidmurni (2017), Social studies subjects contain various fields of science such as geography, economics, history, politics, technology, and law. The importance of social studies learning is because social studies are very dynamic learning where social studies emphasize studying the state of society whose development is very fast (Pernantah, 2019). The achievement of a lesson must involve an active role between educators and students because one of the principles of learning is activeness. According to Tafonao (2018) Teachers are expected to be able to motivate students through the use of media in learning, not only in the classroom but also outside the classroom, so that learning objectives will be achieved. According to Saifudin (2020) One form of effort in increasing the activity and interest of students in learning activities, especially in social studies subjects, is to use animated videos. Animated video is one of the learning media in the form of visualization of images that move at a certain speed (Afridzal, 2018). He further explained that there are 3 kinds of animated videos, namely stop-motion, traditional, and computer. According to Anbia (2015), the eligibility criteria for learning media include linguistic, content feasibility, and presentation components.

Based on the results of observations made at SD Negeri Kledungkradenan on October 14, 2020, it was found that: (1) learning has not used learning media tools, (2) educators expect learning during the pandemic to use digital learning media so that learning is maximized, educators in achieving these expectations experienced obstacles in making digital learning media, especially animated videos, (3) the duration of time in delivering learning in pandemic conditions was not deep due to the demands of a shorter time but must still achieve the expected goals, causing students to lack understanding of the material. Based on this background, a title was taken "Development of Learning Videos Based on Constructivistic Learning Theory on Theme 8 Where I Live in Grade IV Elementary School". This research was supported by Afwan et al (2020), who expressed their opinion that the development of learning multimedia is very necessary for supporting social studies learning in the digital era.

B. Method

According to Sugiyono (2015), Research and development (R&D) is a research method used to produce certain products and test their effectiveness of these products. This type of research is in the form of Research and Development (R&D). The steps or development model in this study uses the ADDIE Model development. The ADDIE model step consists of five stages, namely: (A) analysis, (D) design, (D) development, (I) implementation, and (E) evaluation (Analysis, Design, Development, Implementation, Evaluation). The subjects used in this study were h-grade students at SDN Kledungkradenan. The trials were limited and the trials were wider. The Limited Trial was conducted with 5 students as the subject, then a wider trial using 10 students as the subject. Collecting data in this study using questionnaires, observations, interviews, and documentation. Questionnaires are distributed to students after the trials are completed and students fill them out.

Observations were carried out by 2 teachers, observations were carried out by teachers from the beginning to the end of the trial. Interviews were conducted with students and teachers after the trial was completed. Documentation in the form of photos of test activities carried out. Product development in this research can be said to be feasible if it can meet two aspects, namely validity and practicality. a) Validity, whether the product developed is valid or not, is obtained from the assessment of experts. The minimum level of product validity is in the range > 2.5 . b) Practicality, whether or not the product developed is produced from student response questionnaires. The minimum level of practical value is in the range > 2.5 . The product development in this study can be said to be practical if the average value of the student response questionnaire is at least 2.5 or > 2.5 . The questionnaire used in this study used a scale of four, which was then analyzed using the following formula:

- a. Calculation of the average value often response to questions

$$X = \frac{\text{Earning Score}}{\text{Number of Aspects}}$$

Source: (Trianto, 2012)

- b. Practical value interpretation

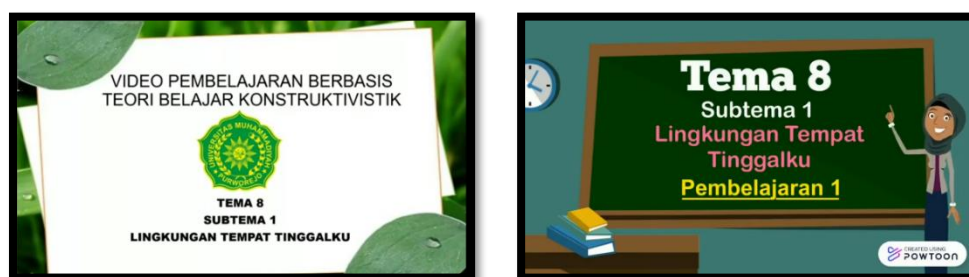
Table 1. Practical interpretation

Score Interval	Criteria
$> 3,25$	Very Practical
$< 3,25$	Practical
$< 2,5$	Practical Enough

< 1,75	Less Practical
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C. Result and Discussion

The results of this study are in the form of a constructivist-based learning video on the theme of 8 areas where I live in the fourth grade of elementary school. This learning video is designed to refer to the five stages of the ADDIE model. The first stage is the Analyze Stage (Analysis). The analysis phase includes problem analysis, media analysis, curriculum analysis, and concept analysis. Problem analysis to find out the basic problems experienced in the learning process. Media analysis is to find out what media have been used previously in thematic learning. Curriculum analysis to equate learning with the curriculum applied in elementary schools. Concept analysis to describe the objectives and collect the main material contained in the theme of the 8 areas where I live, especially in the sub-theme 1 of the environment where I live. The second stage is Design (Planning), the goal is to get a design for learning video media based on constructivist learning theory on the theme 8 My Living Areas. This stage has several steps including 1) Collecting references; 2) Designing the format; 3) Designing a Media Draft; 4) Arranging materials; 5) Layout. The third stage is Develop (Development). The Develop phase includes Expert Validation and development trials. Expert validation was carried out by the three validators, namely media experts, material experts, and practitioners. Aspects assessed include aspects of the appropriateness of content, learning, language, appearance and sound, attractiveness, and use of media. The development trial aims to determine the students' responses to the learning video media based on the developed constructivist learning theory.



Picture 1. Layout Constructivistic Learning Theory-Based Learning Video



Picture 2. Constructivist Learning Theory-Based Learning Video

The fourth stage is Implementation. This stage aims to test the learning media that has been developed. The trial is applied to real conditions, namely in class or by field testing. Field testing is carried out when the developed product has finished revised. The trial was conducted in a limited and wider manner. A limited trial with 5 students and a wider trial with 10 students. The fifth or final stage is the Evaluation stage. The evaluation stage will produce a learning implementation sheet using learning video media based on constructivist learning theory which is evaluated by two observers. The observer is tasked with providing an assessment in the form of scores and comments that have been provided. The trial development of this learning video media can be further developed if it is declared feasible, then proceed with other materials and classes so that the learning video media based on constructivist learning theory can be used in elementary schools with thesis results through scientific publications.

Table 2. Validation Results All Experts

Validation	Scale	Category
Media expert validation	3,50	Very Worthy
Validation	Scale	Category
Material expert validation	3,53	Very Worthy
Practitioner validation	3,75	Very Worthy
Limited Trial	3,75	Very Practical
Extensive Trial	3,75	Very Practical

The results of the media expert's validation obtained an average score of 3.50 and received an assessment with the "Very Eligible" criteria in the final result of the media expert's assessment. Material expert validation is done by showing the learning video media to the validator using the help of a laptop and speakers. The average score obtained from material validation is 3.53 or with the "Very Eligible" Criteria. The validation results from experts or practitioners get an average score of 3.75 or with very feasible criteria. The results of the students' responses in the limited trial got an average value of 3.75 and were included in the very practical category. The results of student responses in the broad trial got an average result of 3.75. It can be concluded that the learning video media based on constructivist learning theory is in the very practical category.

Table 3. Summary of Validation Results of Expert Lecturers & Practitioners

No.	Rated Aspect	Score		Total	Percentage	Value	Criteria
		Lecturers	Expert				
1.	Content Eligibility	54	57	111	84%	3,36	Worthy

2.	Language	7	7	14	87,5%	3,5	Worthy
3.	Display and Sound	18	18	36	90%	3.6	Very Worthy
4.	Attractiveness	7	8	15	94%	3,76	Very Worthy
Average				44	88,87%	3,55	Very Worthy

Based on the score obtained from material expert lecturers and media experts on learning video media based on constructivist learning theory on the aspect of content feasibility, it was obtained 3.36 with appropriate criteria. The results of the validation of the linguistic aspect were obtained at 3.5 with appropriate criteria. Aspects of the feasibility of appearance and sound were obtained 3.6 with very feasible criteria. The attractiveness aspect obtained 3.76 with very feasible criteria. The average value obtained from media experts, material experts, and teachers as practitioners are 3.55 with a very decent category, so the media is suitable for use in learning activities.

Table 4. Practical Limited Trial Data

No.	Aspect	Score	Average	Criteria
1.	Video Display	18	3,6	Very Practical
2.	Application of Learning Video Media Based On	39	3,9	Very Practical
No.	Aspect	Score	Average	Criteria
1	Constructivist Learning Theory			
Average			3,75	Very Practical

The indicators in the student response instrument to the learning video media are divided into 2 aspects, namely the video display aspect and the video application aspect. The display aspect obtained an average of 3.6 with Very Practical criteria and the Media Application aspect obtained an average of 3.9 with Very Practical criteria. So it can be concluded that the learning video media based on constructivist learning theory is in the very practical category.

Table 5. Trial Data Wider Practicality

No.	Aspect	Score	Average	Criteria
1.	Video Display	36	3,6	Very Practical
2.	Application of Learning Video Media Based On Constructivistic Learning Theory	39	3,9	Very Practical
Average			3,75	Very Practical

The indicators in the student response instrument to the learning video media are divided into 2 aspects, namely the video display aspect and the video application aspect.

The display aspect obtained an average of 3.6 with Very Practical criteria and the Media Application aspect obtained an average of 3.9 with Very Practical criteria. So it can be concluded that the learning video media based on constructivist learning theory is in the very practical category.

Table 6. Learning Implementation Results

No.	Aspect	Meeting					
		I		II		III	
		1	2	1	2	1	2
1.	Preliminary Activities	24	24	24	24	24	24
2.	Core Activities	36,76	37,11	37,36	37,42	37,45	37,51
3.	Closing Activity	16	16	16	16	16	16
Actual Amount		76,76	77,11	77,36	77,42	77,45	77,51
Percentage (100%)		99,77%		99,96%		99,96%	

Meeting I obtained a percentage of 99.77% with very good criteria. The second meeting got a percentage of 99.96% with very good criteria. The third meeting obtained a percentage of 99.96% with very good criteria.

Discussion

Feasibility of Learning Video Media Based on Constructivistic Learning Theory Validation was carried out by three experts or three validators. Media experts, materials experts, and practitioners. The results of the media expert's validation were processed according to the scoring guidelines, the average score obtained from the media expert's assessment was 3.5, and received an assessment with the "Very decent" criteria in the final result of the media expert's assessment. The average score obtained from material expert validation is 3.53 or with the "Very Eligible" criteria. The validation results from experts or practitioners get an average score of 3.75 or with very feasible criteria.

Table 7. Summary of Validation Results of Expert Lecturers & Practitioners

No.	Rated Aspect	Score		Total	Percentage	Value	Criteria
		Lecturers	Expert				
1.	Content Eligibility	54	57	111	84%	3,36	Worthy
2.	Language	7	7	14	87,5%	3,5	Worthy
3.	Display and Sound	18	18	36	90%	3,6	Very Worthy
4.	Attractiveness	7	8	15	94%	3,76	Very Worthy
Average				44	88,87%	3,55	Very Worthy

Based on the score obtained from material expert lecturers and media experts on learning video media based on constructivist learning theory on the aspect of content feasibility, it was obtained 3.36 with appropriate criteria. The results of the validation of the linguistic aspect were obtained at 3.5 with appropriate criteria. Aspects of the feasibility of appearance and sound were obtained 3.6 with very feasible criteria. The attractiveness aspect obtained 3.76 with very feasible criteria. The average value obtained from media experts, material experts, and teachers as practitioners are 3.55 with a very decent category, so the media is suitable for use in learning activities.

The product is validated by the three validators to get a score with a decent category, then the next step is to conduct trials or research to obtain data. This research or trial was conducted at SDN Kledungkradenan. Before taking data at the school, the researcher asked permission from the supervisor I and supervisor II. After getting permission, the researcher asked for permission from the school whose data would be taken, after being allowed to collect data, it was carried out from May 10 to May 12, 2021. The first stage of data collection was a limited trial conducted by 5 students consisting of 3 female students and 2 male students who were randomly selected in class IV SDN Kledungkradenan. Data retrieval is done by distributing student response questionnaires after using learning video media whose purpose is to find out the results of student responses showing good or bad results.'

D. Conclusion

Constructivist learning theory-based learning video media on the theme of 8 areas where I live in Grade IV Elementary School is feasible and very practical to be used as a learning medium with the conclusions: The feasibility of developing learning video media based on constructivist learning theory by two expert lecturers and class IV practitioners get an average score of 3.59 with a very feasible category for use as a learning medium; The practicality of learning video media based on constructivist learning theory which was developed in a limited and wide trial obtained an average score of 3.75 with a very practical category used as a learning medium. The disadvantage of this learning video media is that it only develops on theme 8, especially the sub-theme 1 The Environment I Live in. Development of Learning Video Media Based on Constructivistic Learning Theory is expected to be developed and researched further with different themes and different classes so that it can be realized as desired and according to the level of student development.

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