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Development of Video Learning Media based on Filmora in Technology Topics for Elementary Students

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ABSTRACT

In this study, researchers want to produce an innovation in video learning media based on Filmora in technology theme for elementary school students with a total of 29 students. This product is developed using the Research and Development (RnD) method, and using the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model. Research begins by finding out what needs the school needs, especially grade 3 by analyzing the curriculum, students, then making product designs, developing the product, then validating the product with experts in their fields, finally conducting limited trials with respondents. The finished product validated by experts' states that the feasibility level of the product is very feasible with an average value of 91.67%. When conducting a limited trial with 29 students, video learning media fell into the very good category because it scored with an average of 86.72%. Based on the results of the study, it can be concluded that filmora-based video learning media is suitable for use.

Introduction

The development of technology greatly impacts the world of education to help students who have little opportunity to learn to overcome the difficulties faced in the classroom resulting in changes in habits in the learning process (Samathayakul & Thamaduangsri, 2022; Uno, 2010). Learning that was originally teacher-centered is now student-centered (Hidayat et al., 2019). Teachers are one of the main sources of learning so that teachers must have broad insights and skills so that students are more interested in learning, one way that teachers can increase student motivation is by using interesting learning media (Julia et al., 2020). Learning media is one part of the learning process which is used as a teaching aid (Ainina, 2014).

Learning media continues to experience developments including technology-based learning media. Therefore, the application of learning media is one of the things that must be considered for learning today. Learning media is used as a tool used to channel

information from teachers to students and stimulate students' thoughts, feelings, attention, and interests so that the learning process becomes more efficient (Fatahillah et al., 2020). Rudi and Cepi (2009) state that the uses of media in general include clarifying messages so that they are not too verbalistic; overcoming limitations of space, time, energy, and sensory power; creating a passion for learning, more direct interaction between students and learning resources; allowing children to learn independently according to their visual, auditory, and kinesthetic talents and abilities; provide the same stimuli, equalize experiences, and cause the same perceptions (Hamid et al., 2020; Safitri, et.al., 2020). Through the use of video media, teachers can present learning materials in the form of audio visuals such as moving images coupled with writing and the material presented seems more interesting (Lisnawati, 2021).

As for some things that must be considered in using learning media, the main principle that must be considered in using media in every teaching and learning activity is that the media is used and directed to make it easier for students to learn in an effort to understand the subject matter (Sanjaya, 2010). It can be concluded that learning media is a component of learning resources that can stimulate students in learning and can convey and distribute messages in a planned manner so as to create a conducive learning environment that is conveyed either through audio, visual, and audio visual which is easy for students to use and understand (Sumarmi et al., 2021) By using these media, several benefits can be obtained by users, namely a) easy to pack in the learning process, b) more interesting for students, and c) can be edited / corrected at any time. In more detail, audio-visual learning media is useful for delivering more interesting subject matter, including visualization of teaching materials, and creating a more interactive atmosphere because two-way traffic communication in the learning process is more likely to occur (Mellisa & Yanda, 2019; Anggraeni, et.al., 2021; Muhammad, 2021).

In order to realize the idea of making learning media in the form of videos, a capable video editor application is needed so that the videos made are in accordance with expectations. One of the capable video editor applications is wondershare filmora. Filmora or complete wondershare filmora video editor is an application or program designed to make the video editing process easy and simple but has a fairly powerful quality (Muhamad, 2018). According to Meryansumayeka and Purwanti (2015) explained that the development of learning videos can support the effectiveness of learning in the classroom. There are several advantages of wondershare filmora, namely that the application is very light, the operation is very easy, the editing process can be faster, and many effects are available and interesting to do (Kurniawan, 2020). In this case, researchers will utilize the filmora application to develop video learning media in third grader of elementary school in technology theme.

Method

The method used in this research is research and development (R&D). In the field of education, research and development or R&D, is a research method used to develop or validate products used in education and learning (Hanafi, 2017). The product to be developed in this study is a learning video on the theme of technology sub-theme 3 (development of communication technology) for third grader in elementary school. In developing the product, the findings require a development model that is in accordance with the development objectives to be carried out so that the stages and steps of development become directed.

This research uses the ADDIE development model which includes the stages of design, analysis, development, evaluation, implementation and evaluation (Supriyatno, et.al., 2020).

Researchers will develop filmora-based video learning media. The ADDIE instructional model is an instructional process that has been commonly used both traditionally by training developers, this model can be used for a variety of learning strategies, learning models, learning media and teaching materials. In the ADDIE method there are five phases, namely analysis (Analysis), design (Design), development (Development), implementation (Implementation) and evaluation (Evaluation) which present a dynamic training and performance development tool guide (Cahyadi, 2019; Khastini et al., 2021).

At the analysis stage, researchers identify various problems that exist at the research site and then sort them out to find out the basic problems faced in learning in order to know whether the product to be developed is needed or not. Then at the design stage the researcher begins to design what is needed to make the product starting from the concept until the creation of the product based on the results of the analysis that has been done before. Then the researcher develops the product from the concept that has been made before. After the application version of the product is created, the product will be validated by the experts that have been determined. After being validated by experts, researchers develop the product using the validation results from experts until the product is in the feasible or very feasible category, there are three experts who validate research products, namely material experts, media experts, and linguists. After the product has been validated, the product will be tested in a limited trial at SDN Tugu 3 Cimanggis with a total of 29 third grade students as respondents. Finally, evaluate the product to determine the feasibility of the product.

This research and development consist of one lesson which contains three subjects, namely, social studies, mathematics, and civic education. There are three validators consisting of a lecturer as a linguist, a newspaper editor as a media expert, and a class teacher as a material expert. Then there are respondents who will be used as a reference for the feasibility of filmora-based video learning media products for technology theme for third grader elementary students. The data collection technique uses a validation questionnaire that uses a Likert scale, there are four criteria that are translated into numbers from 1 to 5, representing (1) Very Less, (2) less, (3) enough, (4) Good, and (5) Very Good. The results were then analyzed by calculating the percentage of item scores for each survey question. The data obtained was processed by calculating using the formula from Arikunto (2021):

$$p = \frac{\sum x}{\sum x_1} \text{ x } 100\%$$

In giving meaning and making decisions to revise measuring instruments and guidance manuals, qualifications that have the following criteria are used:

Table 1. Qualification of Feasibility Level Based on Average Percentage

No	Achievement Level (100%)	Qualification	Description
1	90% - 100%	Very Good	Very good, no need to revise
2	75% - 89%	Good Feasible	needs revision as necessary
3	65% - 74%	Fai	Fairly feasible, quite a lot to revise
4	55% - 64%	Less	Less feasible, many must be revised
5	0% - 54%	Very poor	Not feasible, must be revised in total

Based on the criteria above, filmora-based video learning media is considered feasible if it meets the percentage criteria of 90% to 100% obtained from the validation results of all experts, namely material experts, media experts, linguists. In giving meaning and making decisions to revise measuring instruments and guidance manuals, qualifications are used which have the following criteria:

Table 2. Criteria for student response to video learning media

No	Percentage	Qualification
1	80% - 100%	Very Good
2	66% - 79%	Good Feasible
3	56% - 65%	Fai
4	41% - 55%	Less
5	0% - 40%	Very poor

Based on the above criteria, filmora-based video learning media is considered very good if it is in the percentage criteria of 80% to 100% obtained from the average respondent's assessment.

Results and Discussion

Based on the data obtained, the products that have been made get a percentage of validation from media experts of 90% with the category "very feasible", linguist validation of 90% with the category "very feasible", and material expert validation of 95% and categorized as "very feasible". While in the limited trial, the results obtained on the use of filmora-based video learning media by students obtained a percentage score of 86.72% in the "very good" category. The results of validation by experts can be described as follows:

Table 3. Results of Media expert validation

No.	Aspect	Assessment Point	Score
1	Presentation	Suitability of material with learning objectives	5
2		Simplicity of learning video	5
3		Ease of use of learning videos	5
4		Audio clarity (narration, sound effects, back sound, music)	5
5	Display	Visual suitability (layout, design, typography, color)	5
6		Animation on the learning video	3
7		Creativity of learning video ideas	5
8	Programming	Interactive and efficiency of learning video	4
9		Stability of learning video	5
10		Reliability of learning video editing	3
Total score			45
Maximum score			50
Average total validity			90

Table 4. Results of linguist validation

No.	Aspect	Assessment Point	Score
1	Contents	Conformity of the language used with the rules of the General Guidelines for Indonesian Spelling (PUEBI)	5
2		Clarity of language used	5
3		How to deliver material in learning videos	4
4		Consistency in the use of terms in video learning media	4
5	Readability	Sentences used represent the content of the message to be conveyed	5
6		Consistent use of font size	5
7		The accuracy of language selection in describing the material	4
8		The effectiveness of the sentence	5
9		The standardization of the terms used	4
10		Use of typeface	5
11		Spacing between lines of normal text arrangement	5
12	Appropriateness to the developmental level of learners	Appropriateness of language with the level of emotional development of learners.	4
13		Language suitability to the intellectual development of learners.	4

14	Orderliness and cohesiveness of the material	5
Total score		63
Maximum score		70
Average total validity		90

Table 4. Results of Content expert validation

No.	Aspect	Assessment Point	Score
1	Content	The material presented is in accordance with the competencies that must be achieved	5
2		Depth of material in the learning video	5
3		Conformity between indicators and learning objectives	5
4		Ease of understanding the material	5
5		The suitability of the concept of the material presented	4
6		The accuracy of the coverage of the material presented	4
7		The conciseness of the material	5
8		Conformity with the curriculum	5
9		Presentation of material can increase students' insight and knowledge	5
10		Clarity of learning objectives	5
11		Clarity of description, discussion, and examples used	4
12	Learning	Accuracy of evaluation tools	4
Total score			57
Maximum score			60
Average total validity			95

The results of validation by material experts, media experts, and linguists obtained an average percentage with a total of 91.67% in the category "very feasible, no need for revision", which means that video learning media based on filmora technology theme is very feasible to be used in limited trials in elementary schools.

Table 5. Recapitulation of Learners' Response to Filmora-Based Video Learning Media Products

Respondents	Total Score	Maximal Score	Percentage
1	84	125	67%
2	115	125	92%
3	117	125	93%
4	89	125	71%
5	118	125	94%
6	114	125	91%
7	111	125	88%
8	105	125	84%
9	116	125	92%
10	122	125	97%
11	75	125	60%
12	92	125	73%
13	106	125	84%
14	106	125	84%
15	108	125	86%
16	108	125	86%
17	112	125	89%
18	117	125	93%
19	108	125	86%
20	106	125	84%
21	104	125	83%
22	108	125	86%
23	105	125	84%
24	122	125	97%
25	123	125	98%

26	122	125	97%
27	125	125	100%
28	116	125	92%
29	105	125	84%
Average Percentage			86,72%

Table 5 presents the results of the limited trial with the number of respondents as many as 29 students getting an average percentage of 86.72% in the "very good" category, which means that the filmora-based video learning media on the theme of technology is very feasible to use in teaching and learning activities.

Learning media is a vehicle for channeling learning messages and information. Well-designed learning media will greatly help students achieve learning objectives. Each type of learning media has its characteristics, advantages and disadvantages. That is why there is a need for systematic planning for the use of learning media (Wahyana, 2018; Ramadhayanti & Mustamiroh, 2019). Benefits of using learning media: 1) Provide feedback for the improvement of learning that has been or will be planned, 2) The subject matter for students is more functional and feels useful to them, 3) Provide direct enrichment experiences to students for what has been conveyed by the learner, 4) Accustom students to be more convincing about the learning taught, so that it will cause respect and admiration for the learner, 5) The feeling of students will be felt in themselves by bringing together the concepts taught by students with what they get outside of school (Akmalia & Nufus, 2021; Hakim et al., 2020). Learning media has an important role in the learning process, learning media used in schools must be in accordance with learning objectives to serve as a benchmark for success in a lesson and be able to generate motivation and response during learning activities, therefore the media needs to be made more innovative and interactive that can improve students' abilities. (Rohaeti et al., 2019).

However, based on the results of interviews that have been conducted in the field, the use of video learning media is still minimal innovation, teachers only use conventional learning media and video learning media as a means of delivering material to students, making the learning process monotonous and boring.

Therefore, the researcher was moved to make the development of video learning media, but the making of this video learning media must go through several long processes. Learning media development is not only useful for improving students' abilities but also useful for teachers to improve the quality of their teaching and professional development (Hidayat et al., 2019). Developing learning media requires careful consideration of the situation, problems, and needs in a particular educational context (Huriyah & Hidayat, 2022; Samathayakul & Thamaduangsri, 2022).

One of the models used to create this video learning media is the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). The first stage in this ADDIE model is collecting information or data to find out what needs or problems exist in third grade of elementary school students. The data collection technique used by researchers is to interview the teacher and several students. After knowing what the needs are, the results found that current learning is less interesting or boring because the learning media used are monotonous and less varied and interactive. Therefore, researchers developed filmora-based video learning media for technology theme sub-theme 3 learning 1, which is expected to be able to help students in the learning process.

The second stage is to make the product in accordance with the results of the interviews conducted, before making the product the researcher must first know the material that the learning media wants to make. Then the researcher also has to know how to operate the

filmora video editing application, and the researcher must make a validation questionnaire instrument and student response. The third stage is to develop products that have been made with the aim of perfecting the product development of researchers in accordance with the direction or input of experts who have been selected by researchers. In this study, there were 3 experts involved, such as material experts, media experts, and linguists. The selected material expert is the third grade of elementary school teacher, then the selected media expert is a staff member of newspaper who has made educational learning media so that he is competent in his field, finally the selected linguist is an Indonesian language and literature education lecturer who is competent in his field. After the experts conducted validation, the validation results were obtained as follows the validator who was chosen to be a material expert. In the first validation of this filmora-based video learning media development received the "very feasible" category so that no product revision was needed, but there was little input regarding the duration of the learning video which was considered too long and feared that it would make students bored.

The validator who was chosen to be a media expert gives her validation. In the first validation of filmora-based video learning media development received the category "quite feasible" so that it had to make quite a lot of revisions to the development product, as for the input given, including the use of greenscreen, font letters, use of transitions, image quality, and proper placement of letters. Then in the second validation the product got a "Very Feasible" category so there was no need to make revisions to the product, but there was little input related to changes in the audio because there had to be a revised sentence.

The validator chosen to be a linguist gives her validation. In the first validation of filmora-based video learning media development received the category "feasible" which means it can be tested limited but there are still some things that must be revised including the use of language that is less standardized, and reduce foreign terms. After revising the product according to the linguist's input, the results of the second validation received the category "Very Feasible" so there was no need to make revisions.

After conducting the validation stage, the filmora-based video learning media development product is ready for a limited trial in one of class at third grader of elementary school. There were 29 students third grader who participated in the limited trial this time, in this study the researcher was the one who taught the class, with the supervision and assistance of the class teacher coordinating the students. After the limited trial of filmora-based video learning media development was successfully carried out, students filled out a response of given questionnaire. The response obtained from students is included in the "very good" category with a percentage of 86.72%. So that, the filmora-based video learning media technology theme is declared feasible without the need for revision, and good for use by teachers and students in the learning process.

The results of this study are not much different from the results of relevant research that has been published about the applicable of filmora video learning for the students especially for elementary school students in different subject, for instance science (Fitriani &Yudiana, 2022; Rizqi & Yasthophi, 2021); mathematics (Rohmah, et.al., 2021); and english language (Yuniari & Juliari, 2021). This shows that the development of wondershare filmora-based learning media is still feasible to use. Learning using video-based media is more effective because it presents material that is more interactive and visual and makes it easier to understand concepts (Al Husaeni, et.al., 2022; Bulkani, et.al., 2022; Pakpahan, 2022). The implementation of learning using electronic technology is very effective in delivering, supporting, motivating and improving the teaching and learning process and assessment

(Litualy, et al., 2022; Kapile, et.al., 2022). Communication can be successful thanks to the role of media in learning that can be designed in an integrated manner and classified as audio-visual media in the form of animated images: films, video compact disks (VCD), television (TV) and others. (Pakpahan, 2022). Wondershare filmora-based learning media is developed based on the needs and developmental level of students. Elementary school students in the operational stage need real learning media so that the media can facilitate and be more meaningful in learning (Nurani & Mahendra, 2019).

Conclusion

Based on the development process and the results of the trial of filmora-based video learning media on the theme of technology in third grader of elementary school. It can be concluded that filmora-based video is feasible for use to elementary school students especially third grader. The feasibility of filmora-based video learning media development products can be proven from the results of expert validation and student responses. The results of validation from experts obtained the following percentages, material experts 95%, media experts 90%, linguists 90%, based on these results the video learning media can be said to be very feasible to implement. And based on the results of the response of 29 students from the limited trial, a percentage of 86.72% was obtained so that this learning media fell into the category of very good and feasible to use.

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