



The Development of Video Tutorial-Based Learning Media for Making Basic Bras in the Lingerie Course

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ABSTRACT

Video media can be used in learning to explain a stage or process. The Lingerie course is a practical course that has a variety of materials, one of which is making basic bras. In learning to make basic bras, there were several students who were less successful in their practical results. This study aims to develop learning media for making basic bras. This development research used the ADDIE model, namely: (1) Analysis, the researcher analyzed the problems that occurred by observing and interviewing, (2) Design, the researcher made a learning media design, (3) Development, the researcher developed the media and then validated the experts so that they got score feasibility as well as comments and suggestions, (4) Implementation, the researcher conducted trials on 30 students, and (5) Evaluation, improvement of the media and obtaining the final results of learning media. It can be concluded that the development of tutorial video media for making basic bras is stated to be very feasible and can be used in learning activities. Suggestions for future researchers can further develop the product by making more diverse variations of basic bras.

Keywords: *learning media*1, *video tutorials*2, *basic bra* 3

1. INTRODUCTION

Learning video media is media that presents audio and visual which contains learning messages containing concepts, principles, procedures, theories, and applications to assist in the understanding of learning material. Learning media plays an important role in the process of delivering material in teaching and learning activities because, with the media, the process of delivering material can be easier for students to understand. The implementation of science and technology in learning will certainly create a technology-oriented education system, especially in educational media. Learning media is a tool or intermediary that is used to deliver messages (learning materials) to students so that they can attract the attention and feelings of students in learning activities [1]. The use of learning media continues to grow along with technological developments, one of the categories of media that can be used is multimedia video. According to [2] video is an efficient media category to support students in the learning process, video has a lot of information and can be completely up to the students directly. Video tutorial media can be used as a tool and learning resource for students and can be a more effective learning alternative. When the selection of media is appropriate, the main purpose of using learning media can be implemented, namely facilitating the process of delivering material [3] [4]. Multimedia video is a type of media with a combination of narration, animation, or recording

showing the stages of the work process. As explained by [5] multimedia can make a big impression in the field of educational media, it can combine text, graphics, animation, audio, and video.

The bachelor's degree of Fashion Design Education study program has practical courses on making clothes or products which are felt to need the use of video tutorials because with the media students can understand and pay attention to every process of making a dress or product easily. One of the practical courses given is the Lingerie course. Some of the competencies contained in the Lingerie course are: (1) understanding knowledge about lingerie, (2) choosing the basic materials for lingerie, (3) planning the production of panties, bras, sleepwear, and shapewear, (4) making patterns of panties, bras, sleepwear, and shapewear, (5) making basic panties, (6) making basic bras, (7) make sleepwear. Based on an interview with the lecturer on January 22, 2020, said that some students were less successful in the practice of making basic bras. This is because the material used in making bras is an elastic material that affects the process of sewing basic bras, therefore the selection of materials used is one of the success factors in making bras.

The purpose of this research is to develop learning media based on video tutorials for making basic bras. This video tutorial media is expected to help in understanding the material so that it can be used as additional teaching material. According to [1] making

learning videos has the following objectives, including: (1) clarifying and making it easier when presenting material, (2) facilitating students in understanding the material (3) can increase students' learning motivation, (4) students can learn independently and repeatedly when using learning videos.

The development model used by researchers is the ADDIE model which has five paths including Analysis, Design, Development, Implementation, and Evaluation. The ADDIE development model is one of the models that shows simple and easy-to-learn stages.

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2. RESEARCH METHODS

The research conducted is a type of development research. This study uses the ADDIE research model which consists of five stages, namely: (1) Analysis, (2) Design, (3) Development, (4) Implementation, (5) Evaluation. The five stages are described in figure 1.

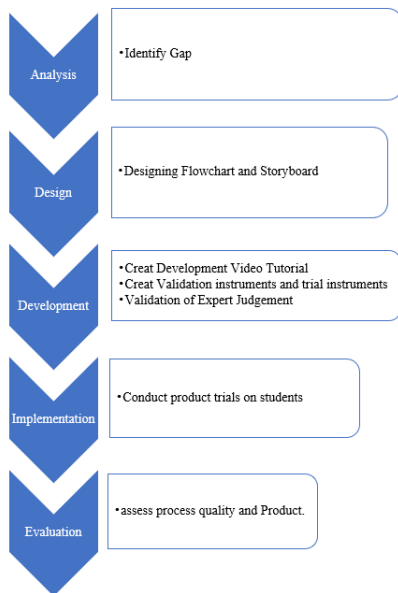


Figure 1. ADDIE Stages Diagram
Source: Personal Documents.

The analysis phase aims to collect data related to the creation of learning media. The analysis was carried out by surveys and interviews to find out the needs and problems that occur in the learning process, then the researchers developed concepts to strengthen the background in making media. Then the researcher determines the appropriate style of presentation of the material to achieve the learning objectives. The design stage is to prepare a video tutorial design that will be made. Design planning is a stage that aims to develop a

content framework for learning media in accordance with the material for making basic bras. At this stage, the researcher made a flowchart and storyboard as a reference when the tutorial video media for making basic bras was developed.

In the development stage, the tutorial video media for making basic bras is developed based on the media design that has been made. The learning media that have been made are then validated by experts, namely material and media experts. The experts validated by filling out a questionnaire. The questionnaire for material experts contains a lattice of learning designs that have been developed are presented in Table 1.

Table 1. Material Expert Validation Sheet Grid.

Aspect	Indicator
Material Content Eligibility	a. Material suitability b. Clarity of presentation c. The suitability of the media with the characteristics of students
Presentation Eligibility	a. language use b. Compatibility of images and videos c. Serving technique
Media Benefits	a. As a learning resource b. Media efficiency and effectiveness c. Media expertise in increasing student activity and creativity d. Media expertise in enhancing a fun educational atmosphere

Source: [6], [7]

The media expert validation questionnaire contains a grid of questions on the visualization of learning media are presented in Table 2.

Table 2. Grid of Media Expert Validation Sheet [6].

Aspect	Indicator
Presentation Aspects	a. Convoluted presentation of material b. Support the media for student involvement in learning
Aspects of Media Effects on Learning Strategies	a. Medium is easy to use b. Media supports student learning independence c. The ability of the media to increase motivation d. The ability of the media to increase knowledge
Display Eligibility	a. Media design regularity b. The choice of font type and size makes the media more attractive c. Audio usage d. Compatibility of the video with the material e. Easy to read text/writing f. Color selection g. Operational

Researchers use a Likert scale which is useful as a measure of the feasibility of a teaching material through one's opinion or perception. The Likert scale has an

arrangement ranging from very positive to negative are presented in Table 3.

Table 3. Categorization and Weighting of Likert Scale Scores [8].

Answer	Score
Very Good	4
Good	3
Bad	2
Very Bad	1

Data was obtained from experts in the form of scores (quantitative data) as well as comments and suggestions (qualitative data) related to learning media. Quantitative data obtained in the form of numbers from validators are used to determine the feasibility of the learning media being developed. Quantitative data using a questionnaire, the calculations using the formula adapted by [7]

$$V\text{-ah} = \frac{Tse}{Tsh} \times 100 \%$$

Information:

- V-ah = Validity
- Tse = Total empirical score obtained
- Tsh = Maximum expected total score
- 100% = Constant

The results of data analysis are interpreted based on the qualifications of the product validity test results with the percentage range presented in Table 4.

Table 4. Percentage Range of Score Achievement Criteria [7].

No	Criteria of Score Achievement	Validity Level
1.	85.01% -100%	Very feasible, or usable without revision
2.	70.01% -85.00%	Feasible enough, or usable but needs minor repairs
3.	50.01% -70.00%	Less feasible, it is recommended not to use it because it needs major repairs
4.	01.00% -50.00%	Not feasible, or unusable

Validation to experts is carried out until the media is declared feasible to be implemented in learning activities. The following is the data from the validation of material experts and media experts that have been carried out

The validation of material experts assesses the aspects of the feasibility of the content of the material, the feasibility of presentation, and the benefits of learning media. Material expert validation data was obtained by filling out a questionnaire of material experts, so that a

feasibility score, criticism, and suggestions were obtained. The results of expert validation of video tutorial material for making basic bras are presented in Table 5.

Table 5. Data from Material Expert Validation Results.

No	Scoring Aspect	Tse	Tsh	V-ah (%)	Ket.
1.	The eligibility of the content of the material	26	28	92.8%	Very Feasible
2.	Presentation eligibility	26	28	92.8%	Very Feasible
3.	Benefit	24	24	100%	Very Feasible
Amount		76	80	95%	Very Feasible

The data presented above shows that the empirical score (Tse) obtained is 76 out of a maximum score (Tsh) of 80, henceforth a percentage result of 95% is obtained. The results of these percentages indicate that the tutorial video learning media for making basic bras is in the very feasible category.

Media expert validation data was obtained from the assessment of presentation aspects, the effect of the media on learning strategies, and the feasibility of media display. Media expert validation data was obtained through filling out a questionnaire by media experts, to get a feasibility score, comments, and suggestions from media experts. The results of the validation of video tutorial media experts for making basic bras are presented in Table 6.

Table 6. Data from Media Expert Validation Results.

No	Scoring Aspects	Tse	Tsh	V-ah (%)	Ket.
1.	Presentation aspect	12	12	100%	Very Feasible
2.	Aspects of media effects on learning strategies	23	24	95.8%	Very Feasible
3.	View eligibility	51	56	91.1%	Very Feasible
Amount		86	92	93.5%	Very Feasible

According to the validation results of the media experts above, the empirical score (Tse) is 86, derived from a maximum total score (Tsh) of 92, and the percentage results obtained are 93.5%. The percentage results, if adapted from the percentage range of the criteria for achieving the score, indicate that the result is in the very decent category.

The implementation stage is the stage of testing the media after being declared feasible by the validators. Video tutorial media was tested on 30 students of the bachelor's degree of Fashion Design Education Study Program who had taken the Lingerie course. Media

feasibility by students is done by using a questionnaire instrument presented in table 7.

Table 7. Trial Questionnaire Sheet Grid [9].

Aspect	Indicator
Material Presentation	a. The material provided is in accordance with the learning objectives. b. Media interactivity c. Material depth d. Presentation of material is easy to understand e. Systematic, coherent, clear logical flow
Media View	a. Learning media design b. Clarity of video, images, and audio c. text clarity d. The attractiveness of learning media
Benefit	a. Ease of learning b. Increased motivation to learn c. Improved learning outcomes

The evaluation stage aims to assess the quality of learning media related to learning processes and outcomes. At the evaluation stage, the researcher gets the results of the learning media that have passed the validators, trials, and several revisions that have been made. Revisions are made in accordance with unmet needs so that the resulting learning media is truly feasible and can be used in learning activities

3. ANALYSIS RESULTS AND DISCUSSION

3.1. Research result

Field trials were conducted on 30 students by filling out 21 statement items. Trials were only conducted on students who had taken lingerie science courses. The pilot questionnaire contains 3 aspects, including aspects of material presentation, media appearance, and benefits. Based on the results of trials by students, the calculation of all aspects is as follows are presented in table 8.

Table 8. Implementation Result Data.

No	Scoring Aspect	Tse	Tsh	V-ah (%)	Ket.
1.	Material Presentation	1.121	1.200	93.4%	Very Feasible
3.	Benefit	446	480	93%	Very Feasible
Amount		2.333	2.520	92.58%	Very Feasible

Based on the data presented above, it shows that the presentation aspect of the material received an empirical score of 1.121 with a maximum score of 1,200, the percentage result obtained was 93.4%. In the aspect of media display, it received an empirical score of 766 with a maximum score of 840, the percentage obtained was

91.2%. Furthermore, the benefit aspect is known to receive an empirical score of 446 out of a maximum score of 480, the percentage obtained is 93%. The total of all aspects shows a Total Empirical Score (Tse) of 2.333 with a Maximum Total Score (Tsh) of 2.520, the percentage obtained at the implementation stage is 92.58% and is included in the very feasible category.

3.2 Discussion

Video tutorial media is said to be feasible from the aspect of presenting the material because the material presented is in accordance with the learning objectives, namely making basic bras. Learning media is used to convey or give messages with educational and learning objectives [10]. Media can serve students for independent learning, and encourage curiosity and interest in students to deepen the material. The objectives of learning videos include clarifying and facilitating teachers when providing audio and visual material, students can easily understand the material, attract students' interest in learning, can be used independently at home and can be played repeatedly [11] [12]. Learning media can increase students' interest in learning new things in the lessons delivered by the teacher [13].

The material in the video tutorial is easy to understand, using appropriate terms and language, and the presentation of the material in the video is presented sequentially and systematically. Learning videos as media that are created and arranged systematically and sequentially with the curriculum as a reference, in its development and application the principles of learning are applied to attract the attention of students using the media that has been provided more easily [12]. This learning media is easy to operate on all devices such as laptops and smartphones. Wiarto [14] argues that in choosing media it must be student-oriented, meaning that it is necessary to consider what advantages students will gain by using the media.

Videos, images, and audio are presented in an attractive way, and the text is displayed clearly so that it can make it easier for students to learn and understand the material. The overall appearance of the video is quite interesting in terms of the background of the video capture and the color combination of the video. Video tutorials have various advantages, including having an attractive appearance, using video recordings so that some viewers get information from experts, videos are easy to use to observe objects closer or moving [15]. learning media must meet at least one requirement in terms of beauty which includes aesthetics, and a harmonious color combination, to attract attention to use it [16].

Presentation of video tutorials can generate student motivation and interest in learning. According to [17] learning media is an intermediary used to transfer messages or information to attract attention during learning activities and learning objectives can be achieved. Learning media functions to improve the

quality of student learning, attractive media makes students' motivation and desire higher in learning [18] [19]. According to [20] that one of the drivers of student learning motivation is the use of learning media, according to an educational perspective media is one of the things that determines success in the learning process. With good media and appropriate in terms of material and media, the learning video is an alternative media to increase learning creativity and includes media that is suitable for application to both group and individual learning. Learning video media can also distribute better understanding to students.

4. CONCLUSION AND SUGGESTIONS

4.1 Conclusions

This development research produces learning media products, and video tutorials for making basic bras. This study uses the ADDIE development model. Video media that has been validated by material experts and media experts shows validation results with very feasible criteria. In the trial process, the criteria obtained from all aspects show the results are very suitable for use in learning activities.

The video tutorial for making basic bras has a video duration of 20 minutes and contains material for making basic bras, including: (1) understanding basic bras, (2) tools and materials needed, (3) making basic bra patterns, (4) the cutting process, (5) sewing process, and (6) finishing process. Learning media video tutorials for making basic bras are expected to help students in the learning process for making basic bras.

4.2 Suggestions

Based on the conclusions above, suggestions for future researchers include: (1) being able to develop this product further with more diverse basic bra variations so that the techniques used will be different, (2) other researchers can create different types of learning media using different types of software.

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