Development of Video Tutorial Learning Media on Scalp and Hair Care Course

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Abstract. This study aims to develop learning media in scalp and hair care courses that can help students understand the concept of material regarding hair care so that they can practice scalp and hair care appropriately and correctly. development of learning media for scalp and hair care video tutorials using the 4D Model research and development method (define, design, develop, disseminate). Validation of this video tutorial media product involves two media experts and two material experts. Meanwhile, 1 lecturer and 30 students from the cosmetology and beauty department participated in the practicality test. The results of this study indicate that the learning media developed are considered suitable for use in learning by media experts, material experts, lecturers, and students. This feasibility can be seen from the media expert assessment score of 4.7 categories, which is excellent; the material expert assessment score of 4.5 categories, which is very practical; and the student assessment score of 4.6 categories, which is very practical.

Keywords: learning media, video tutorials, scalp and hair care

1 Introduction

The world of education has undergone changes in dealing with the post-COVID-19 pandemic situation. The transition from the pandemic to the new normal period has made the learning process change so that it can affect the quality of learning [1]. The way students learn during the pandemic causes them to be passive, resulting in lower learning quality, lower motivation, and poorer academic results [2]. [3]. Students are accustomed to learning online and comprehending material on their own. The transition to learning without proper preparation can have a negative impact on the emotional experience of students following the learning process [4]. During the pandemic, there are many emotional challenges for students. The researchers found that positive emotions such as happiness and optimism decreased, while negative emotions such as stress and sadness increased [5]. Students experience difficulties with technology and the internet that hinder success and concentration in following the learning process [6] [7]. This condition makes students inactive in participating in learning even though, during the new normal learning period, they have implemented a hybrid learning system between online and face-to-face in class.

The impact of students' conditions in facing learning in this new normal period can be seen in the results of student practice in class. Students understand the material independently through handouts and job sheets but have difficulty applying it when practicing in class [8]. In addition, limited time and opportunities in the new normal period give lecturers less time to demonstrate practical courses in the classroom. This has led to many students not being able to practice properly [9]. This condition occurs in the Scalp and Hair Care course. Students cannot

do the hair care process correctly, especially when doing massage movements. Many massage movements are performed incorrectly and do not match what is described.

Overcoming problems in practical courses, lecturers, in addition to using handouts, job sheets, and demonstrating material on scalp and hair care, can use learning media in the form of video tutorials. Several studies have shown that the addition of videos can help the learning process, which is as good as face-to-face learning in the classroom [10] and [11]. The use of learning media in the form of video tutorials can increase students' understanding of the practical material taught and is effectively used to improve student learning outcomes [3] [9]. Video tutorials are an overview of a series of stages of the process to assist students in understanding material displayed by the teacher whose content is learning material as guidance [12]. Video tutorials assist students in visualizing a subject. Students can actively participate in all learning practice activities that are in accordance with what is taught in the video.

The video tutorial produces a demonstration of not only the movement itself but also the context of the movement along with the preparation, process, and results demonstrated [13] [3]. Video tutorials are more advantageous because they show easy-to-follow movements that make it possible to learn and duplicate the observed movements [14]. Various studies have reinforced the fact that video tutorials can improve learning [15–18]. Video tutorials consist of a series of images containing learning messages and are broadcast by lecturers to make it easier for students to understand the teaching materials provided by lecturers and stimulate students directly because video tutorials have the advantage of being able to be learned repeatedly [19].

The other advantages of video tutorials are that the display attracts attention, that with video recording some viewers obtain information from experts, that demonstrations are usually difficult to prepare and record, that at the time of study the lecturer can focus the students' attention on the presentation, that time efficiency is improved, and that the recording that has been made can be played back. Students can also observe objects, get closer to objects that are moving, adjust loud or weak sounds, and freeze projection images to carefully observe the image [20]. In addition, video tutorials have advantages, namely; (1) can attract attention in a short time (2) by recording videos some viewers obtain information from experts (3) demonstrations that are difficult to prepare and record, so that during learning time the lecturer can focus attention on the presentation (4) save time and the recording can be played repeatedly (5) can observe the object more closely to the object in motion (6) the loud or weak sound can be set and costomized (7) the projection image can be pause to observe the image closely [21].

Another advantage of video tutorials is that 1) Video tutorials are very clear in demonstrating a phenomenon and and procedure that involves a movement 2) Video tutorial users can speed up and slow down the movement of the tutorial video so that the material presented is clearer 3) Video tutorials can utilize animations to illustrate abstract and moving material. 4) Video tutorials can attract students' attention and interest through the medium of moving images, audio, and text. 5) Students as smartphone users are quite easy to use video tutorials 6) Video tutorials can replace field study activities [22]. Based on the advantages possessed by this video tutorial, researchers will conduct development research that produces hair care tutorial videos that are suitable for use in the online learning process in the hair and hair skin care course so that students can practice scalp and hair care correctly and correctly.

2 Research Method

This study employs a form of research and development (R&D) that aims to produce products that can be used to improve and enhance the quality of learning [23][24]. This study produced a Scalp and Hair Care video tutorial for educational purposes. This research demonstrates that there are learning tools that can facilitate students' comprehension of hair care material, allowing them to practice in an appropriate manner. This investigation utilized a Four-D device Development Model. This model consists of four stages of development: Define, Design, Develop, and Disseminate, or 4-D: defining, designing, developing, and distributing [25].



Figure 1. Four-D Development Model

Validation of this video tutorial media product is carried out during the validation stage, which involves two media experts and two material experts. This research also involved lecturers and students of cosmetology and beauty (FPP UNP) who attended the Scalp and Hair Care lecture at the practicality stage. Data collection is carried out through validation sheets from media experts and material experts. Based on these inputs, the latest revision of the product was made, and a product that was ready to be used was obtained during product trials. Then it is distributed to lecturers and students to explain the practicality of using tutorial media.

This study contains both qualitative and quantitative data. Qualitative data is obtained from the comments and advice of experts, while quantitative data is obtained from the results of validation by material experts, media experts, lecturers, and students. Quantitative data in the form of scores is then analyzed and converted into the form of qualitative data. The results of the conversion then become a benchmark to determine the feasibility of developing video tutorial media. Observations, interviews, and questionnaire sheets (for the validation of material experts and media experts, and questionnaire sheets for the practicality assessment of the product) are the instruments or tools used for data collection.

The data from this study is in the form of responses from material and media experts to the quality of products that have been developed in terms of material and media aspects, and data on the practicality of product use by lecturers and students. Data in the form of comments, suggestions, revisions, and observations of researchers during the trial process are analyzed descriptively and qualitatively and concluded as input to improve or revise the product that has been developed. Meanwhile, data in the form of response scores of material experts, media experts, lecturers, and students obtained through questionnaires were analyzed descriptively and quantitatively with categorization techniques. The steps used to determine the quality criteria of the product that has been developed, i.e., the data obtained from the questionnaire, are converted first into interval data as follows: Excellent = 5, Good = 4, Enough = 3, Less = 2, Very Less = 1. The score obtained was then converted into a five-scale qualitative score with reference to the formula [26]:

Value	Criterion	Mean Interval Shoes
5	Excellent	4.2 < x
4	Good	3.4 < x < 4.2
3	Enough	$2.6 < x \le 3.4$
2	Less	$1.8 < x \le 2.6$
1	Very Lacking	$x \le 1,8$

Table 1. Conversion of Average Score into Criteria for Assessing Product Eligibility

3. Results and Discussion

The development of video tutorial learning media in the Scalp and Hair Care course produces a product in the form of a valid and practical video tutorial learning medium. The process of making video tutorial learning media in accordance with the development process goes through several stages, namely the defining stage, the design stage, and the development stage. For a clearer description, see the following:

a. Defining Stage

This video tutorial learning medium for the Scalp and Hair Care course is designed based on a needs analysis, namely to overcome the difficulties experienced by Cosmetology and Beauty students in learning the scalp and hair care courses. The problem that occurs in learning about scalp and hair care is the limitation of teaching materials and media used by lecturers and students in learning. Students do not fully understand the job sheets and modules used for online learning, so students cannot carry out the movement of practicing hair care correctly. The tendency of student practice outcomes is not in accordance with the expected competence and learning outcomes.

The above problems have an impact on the ability of students to carry out hair care practices; the solution that can be used to overcome these problems is to develop learning media. The learning media developed is a video tutorial that contains information about scalp and hair care. As a result, there is a learning media design that can make it easier for lecturers and students to deliver material online and for independent learning.

1) Semester Learning Plan Analysis

The analysis was carried out by examining the semester learning plan for the Scalp and Hair Care course. Students must have the ability to practice scalp and hair care, especially in the process of washing hair, creambath, hair mask, and hair SPA. All these scalp and hair care skills are needed to be precise and correct according to the needs of the industrial world.

 Material analysis Material analysis is carried out by discussing the course with the lecturers and reviewing modules and reference books used by the lecturers in learning about scalp and hair care. As a reference to determine and complete the content and learning materials needed, in the development of learning media video tutorials in the Scalp and Hair Care course, topics are described in sub-subjects systematically and relate a concept to other relevant concepts. The material of the Scalp and Hair Care course is hair washing, creambath, hair mask, and hair SPA. The goal of the Scalp and Hair Care course is for students to be able to practice hair washing, cream baths, hair masks, and hair SPAs appropriately and correctly, as well as apply occupational health and safety. Students can more easily master the material presented by watching the tutorial video because the video describes in detail the practical processes of washing hair, using a creambath, applying a hair mask, and having a hair spa.

3) Student analytics

This research was carried out in the Department of Cosmetology and Beauty. Learning media using video tutorials for the Scalp and Hair Care course is designed by analyzing the results of the practice that has been carried out by students, where the practical results are still far from the existing learning outcomes. Students tend to forget the concepts learned and to be original in their practice, so the work process is not carried out in accordance with the procedures that should be carried out. By using video tutorial learning media in their learning, students become more enthusiastic, active, and creative in their learning and can practice hair washing, cream baths, hair masks, and hair SPA skills independently.

b. Design Stage

The stage of designing learning media for scalp and hair care video tutorials begins with systematically designing the content of the tutorial video. Furthermore, the process of taking video images starts with the capture of tools, materials, and linen and continues with the work process. Video editing tutorials using Canva and Capcut with video shooting using a camera with a Fujifilm KIT 1545mm lens The display of the learning media for the Scalp and Hair Care tutorial video contains the opening cover, learning objectives, and continues with videos of tools, materials, flax, and work processes.

c. Development Phase

The development of learning media for scalp and hair care video tutorials, with the target users being students of the Department of Cosmetology and Beauty. In this development, the theme formulated is "Scalp and Hair Care," which consists of hair washing, cream baths, hair masks, and hair SPA. After completing the process of making a scalp and hair care video tutorial, I continued by conducting a validity test. The media validity test is taken through a validation instrument filled in by 4 validators, consisting of 2 media experts and 2 material experts. Data from media experts and material experts is used as a reference to revise the initial product.

Media experts who are validators in this research product are Winanda Amalia, and Elsa Rahmayanti. Data from media experts is obtained by providing Likert-scale assessment instrument sheets containing didactic aspects, construction aspects, and technical aspects, accompanied by video learning media products for scalp and hair care tutorials. In its implementation, media experts use and observe learning media products, then provide assessments, comments, and revision suggestions related to existing aspects. Based on the results of their observations of the learning media product, media experts fill out an evaluation sheet and provide suggestions and input to improve the learning media they have developed.

No	Media Expert	Total Score	Average	Criteria
1	Winanda Amalia	131	4,7	Very good
2	Elsa Rahmayanti	131	4,7	Very good
	Average	131	4,7	Very good

Table 2. Recap of The Average Score of Media Expert Validation Results

Media experts state that, in general, this medium of learning for scalp and hair care video tutorials is worth it with a little revision. The comments and suggestions for revising products from media experts are:

- 1) Text model to be uniformed
- 2) Repeated addition of video creators on multiple slides
- 3) Add voice narration to long-duration parts of the work step
- 4) In the closing part is added with the team involved in making the video, for example cameramen, models, video editing and others

Meanwhile, the material experts who became validators for this research product were Mimi Yupelmi, S.ST., M.Pd., and Tyas Asih Surya Mentari, S.Pd., M.Pd. Data from material experts was obtained by providing Likert-scale assessment instrument sheets containing aspects of content quality, aspects of learning quality, and aspects of display quality, accompanied by learning media product video tutorials on scalp and hair care. In its implementation, material experts use and observe learning media products, and then material experts provide assessments, comments, and revision suggestions related to existing aspects. Based on the results of observations on the learning media product, the material expert fills out an evaluation sheet and gives suggestions and inputs to improve the learning media developed.

No	Material Expert	Total Score	Average	Criteria
1	Mimi Yupelmi	130	4,6	Very good
2	Tyas Asih Surya Metari,	120	4,3	Very good
	Average	125	4,5	Very good

Table 3. Recap of The Average Score of the Material Expert Validation Results

Media experts state that, in general, this medium of learning for scalp and hair care video tutorials is worth it with a little revision. The comments and suggestions for revising products from media experts are:

- 1) Learning outcomes are clarified at the beginning of the material
- 2) Add voice narration to hair washing and back sequencing movements
- 3) Suggest replacing the word development team

Based on the results of the validity test with four validators, improvements were made according to existing suggestions. Following that, a practicality test was completed by one lecturer and thirty students from the Department of Cosmetology and Beauty. Practicality test data includes the practicality of media in terms of media convenience, media quality, and media attractiveness.

Table 4. Recap of The Average Practicality Result Score

No	Practicality	Total Score	Average	Criteria
1	Lecturer	93	4,7	High practicality
2	Student	136,8	4,6	High practicality

4. Conclusions

Based on the results of research on the development of video tutorial learning media in the Scalp and Hair Care course that has been carried out, the following conclusions are obtained:

- a) The result of the development of this research is a product in the form of a scalp and hair care video tutorial in the Scalp and Hair Care course. The development process of this video tutorial refers to the 4-D development model, namely define, design, and develop.
- b) This development research resulted in valid and practical scalp and hair care tutorial videos for scalp and hair care courses. This video was developed based on the course synopsis and semester learning plan for the Scalp and Hair Care Course.
 - 1) The developed video is categorized to be valid after being validated by 4 validators, namely 2 experts for media validation and 2 experts for material validation. The assessment results for media validation were 4.7 with excellent categories and the assessment results for material validation were 4.5 with excellent categories
 - 2) The developed video can be said to be practical by the lecturer and 30 students of the Department of Cosmetology and Beauty. The results of the lecturers' and students' assessment of the practicality of this video tutorial of 4.7 and 4.6 are in the very practical category.

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