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Practical Analysis of Video Tutorials in Learning the Use of Electric Skin Care Equipment

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Abstract
The development of education today is marked by rapid technological innovation. This requires adjustments to the education system to keep in line with the needs of the workplace, which is also constantly changing due to technology. In other words, education needs to adapt so that graduates have skills that are relevant to the existing job market. The selection and use of learning media must be in line with the rapid advances in science and technology. Therefore, lecturers are expected to utilize information and communication technology to support the teaching and learning process, so that learning becomes more effective. The Cosmetology Education Study Program, as one of the study programs at State University of Medan, has a vision to become a superior study program in the field of vocational education, mastering technology, industrial engineering, and culture, in line with the field of cosmetology. To facilitate students in learning the material, the author created a digital learning medium in the form of a video tutorial on the use of electric facial care tools in the electric skin care subject in the Cosmetology Education Study Program, Faculty of Engineering, Medan State University. Therefore, this study aims to describe the practicality of video tutorials. This study is a quantitative descriptive study with data collection using questionnaires. The respondents in this study were 35 students majoring in Cosmetology who took the Electric Skin Care course in the odd semester from August to December 2024. The results of the study indicate that the tutorial videos used in the lectures were categorized as very practical with a score percentage of 42%; practical with a score percentage of 50%; and 8% were categorized as sufficient practical.

Keywords: practical analysis, cosmetology education, facial care, electric skin care equipment, learning media, beauty

INTRODUCTION

The beauty industry has been developing rapidly along with the increasing public recognition of the importance of self-care, especially facial care. Facial care is one of the important aspects in maintaining skin health and appearance. In today's modern society, recognition of the importance of facial care is increasing, along with the development of information about skin health and beauty. The face, as the most visible part of the body, is often the main focus in efforts to maintain appearance. Therefore, facial care is not only considered a beauty routine, but also part of overall self-care.

In line with technological developments and innovations in the beauty industry, the use of facial care devices with electrical technology is also increasingly being used to improve the effectiveness of treatments. This is supported by the statement by Maida, et al. (2023) that in this era, the use of electrical devices in beauty has become an important necessity for facial skin care with technology. Every type of electric beauty device can be used to care for the skin, whether it is problematic or not. For skin that is not problematic, this serves as preventive care. Meanwhile, problematic facial skin requires extra care using beauty devices to improve its condition. There are various types of devices available, such as Sterilizers, Face Brushes, Ozone Steamers, Magnifying Lamps, Vacuum Suction Devices, High Frequency Devices, and Galvanic Devices. These devices are designed to provide optimal results, such as improving blood circulation, stimulating collagen production, and helping with the absorption of skin care products.

Technological improvements in the beauty industry have certainly encouraged educational institutions,

particularly the cosmetology program at State University of Medan, to integrate the use of electric facial care devices into the Unimed curriculum. The Cosmetology program at Unimed is responsible for preparing students to become competent professionals in the field of beauty. This program offers a variety of courses that must be taken, one of which is Facial Care with Electric Tools. This course teaches students how to use electric facial care tools, with the aim of training and educating them to be competent in the field of facial care so that they can later implement their knowledge in the workplace. However, in reality, many students still face various obstacles in understanding and using facial care tools due to limited access to learning materials directly and quickly.

The implementation of learning how to use electric facial care tools is still not optimal. Currently, lecturers still demonstrate how to use electric facial care tools because there is no digital learning media that is compatible with the tools available in the study program. After the lecturer gives a demonstration followed by a practical activity for students, many students still have difficulties using the tools, so the lecturer has to explain again to each student, which results in suboptimal learning. Learning activities have not used digital learning media because there are no comprehensive and complete videos on the use of electrical devices. This is certainly an obstacle due to the limited time and supervision of lecturers when they have to repeatedly explain to students the use of facial care devices with electrical devices in turn. Therefore, learning media is needed to help students understand and master the techniques of using facial care devices properly. Additionally, it is important to explore how the use of electric facial care tools can be optimized in the context of education and professional practice.

In this increasingly advanced digital age, the use of video tutorials on how to use electric facial care devices has become one way to optimize digital learning media in supporting education. Video tutorials offer clear visualizations and easy-to-follow steps, helping users understand how to use facial care devices with the right techniques. Additionally, video tutorials can be accessed anytime and anywhere, providing flexibility for users to learn at their own pace and convenience. This aligns with the view (Dahlan et al., 2023) that interactive video-based learning is increasingly popular in school or educational settings. Educators have expressed that these videos can increase student participation, encourage them to learn independently, and provide motivation by adapting to the needs of learners.

This study aims to examine and provide a clear illustration of the practicality of video tutorial media in the context of learning how to use electric skin care devices. The results of this study are expected to contribute to the development of more effective and engaging learning methods/media, as well as improve the skills of users (students) in learning how to use electric skin care devices. Through this research, it is hoped that ways to improve the learning experience of users can be found, as well as provide recommendations for facial care device providers and educators in developing more effective learning materials. Thus, users will not only be more confident in using facial care devices, but will also obtain more satisfying and safer results for their skin health.

METHOD

This study was conducted using a quantitative descriptive approach with the aim of evaluating the practicality of video tutorials in the context of learning how to use electric skin care devices. Quantitative descriptive research is a method used to describe the characteristics of a particular population or phenomenon. This method is very useful in providing a deep understanding of various aspects related to the research subject, such as behavior, attitudes, or certain conditions. In this study, data were collected and analyzed using statistical methods to provide a deeper understanding of the variables being studied (Creswell, 2021). The subjects of this study were 35 students majoring in cosmetology who took the electric skin care class in the odd semester from August to December 2024. The data collection instrument used in this study was a questionnaire in the form of a survey designed using a Likert scale to measure various aspects of students' understanding of the use of electrical devices. The data analysis technique used was descriptive data analysis, such as percentages, averages, and frequency distributions. The collected data were analyzed descriptively to determine the practicality level of video tutorials in learning how to use electrical skin care equipment.

RESULTS AND DISCUSSION

Electrical Skin Care Subject

Electrical Skin Care Equipment is one of the specialized subjects in the Department of Cosmetology Education at the State University of Medan, designed to provide students with knowledge and skills in the use of facial care technology. In this course, students are prepared to understand the various tools used in facial

care, such as: Sterilizers, Face Brushes, Ozone Steamers, Magnifying Lamps, Vacuum Suction Devices, High-Frequency Devices, Galvanic Devices, Vapor Sprayers, and Ultrasonic Devices. Additionally, they have competencies related to the proper and correct use of these electrical facial care tools according to their functions, uses, indications, and contraindications. These competencies will certainly make it easier for them to face academic and professional challenges.

Video Tutorial Learning Media

Video tutorials are a type of audiovisual learning media that provide step-by-step instructions combining visuals, audio, and text, making them ideal for teaching practical skills. Video tutorials allow students to see directly how to use tools, operating techniques, and safety aspects that are sometimes difficult to understand through text or verbal explanations alone (Morgado et al., 2024).

In the context of learning aesthetic skills, particularly the use of electric skin care tools, this medium is an important tool for visualizing procedures clearly and repeatedly. This was in line with the research by Zulfiani and Sugiyono (2020), which proved that the creation of media can improve student achievement in the learning process.

Theoretically, the use of interactive videos is based on the cognitive theory of multimedia learning developed by Mayer (2014) and reinforced by Clark and Mayer (2016), which emphasizes that individuals are able to learn more optimally when they receive visual and auditory information simultaneously. In addition, Mayer (2014) also explains that interactive features such as quizzes and simulations can increase active participation, understanding, and memory retention among students. According to Natarajan et al. (2022), the use of interactive educational videos has been proven to improve students' skill competence and knowledge, while also supporting independent learning and increasing motivation to learn. This is in line with the purpose of using video tutorials in teaching how to use electric skin care devices, including technical details that require special attention such as hand placement, electrode use, and device sterilization procedures that require

step-by-step demonstrations and the ability to repeat them as needed by students. Second, from a cognitive perspective, the combination of audio and visual elements supports the process of understanding and knowledge retention through dual coding mechanisms. Meta-analysis research results show that video-based learning can improve learning outcomes and procedural understanding compared to text- or speech-based methods alone (Morgado et al., 2024).

Moreover, tutorial videos presented in an attractive formats, such as infographic videos, can enhance students' emotional and cognitive engagement while boosting their learning motivation (Lackmann, 2021). From a compensatory perspective, this medium provides students with the opportunity to learn more flexibly and adapt to their individual abilities by rewinding, fast- forwarding, or pausing the video at certain points. This makes video an inclusive medium that can be tailored to individual needs. Furthermore, videos also serve to standardize the delivery of material because all students receive the same demonstration, thereby reducing variations in instruction due to differences in teaching methods (Silab et al., 2024). Ratri, Afifah, Zulfiani, and Elvera (2025) showed that the use of Instagram Reels-based video tutorials is an effective and flexible additional learning medium to support learning activities.

Therefore, video tutorials have an important role in practical learning, including in learning how to use electric skin care tools. These video tutorials not only serve as a means of procedural demonstration, but also reinforce conceptual understanding, foster motivation, provide access to independent learning, and maintain standards in the delivery of material. The combination of these functions and benefits makes this medium relevant for supporting the achievement of student competencies in line with the demands of technology-based learning. These video tutorials were created as learning media for Unimed Cosmetology Education students of the 2023 cohort in their third semester who are taking the Skin Care Using Electrical Devices subject.

The development process of this media was implemented through a number of research stages, beginning with collecting references and exploring information related to the design of video tutorials on the use of electric facial care devices. After that, planning the content of the Video Tutorial on the Use of Electric Facial Care Devices was proceeded with the creation of the Video Tutorial on the Use of Electric Facial Care Devices. After that, the designed video was reviewed by experts and finalized based on the input and suggestions given in order to produce a good and high- quality video. Next, the Video Tutorial on the Use of Facial Care Tools with Electric Devices was disseminated directly to students. This was followed by collecting feedback from students in the form of a questionnaire to determine the level of satisfaction, practicality, and contribution of this media in maximizing the learning process. The research questionnaire table is presented below.

Table 1. Research Questionnaire

No.	Question
1	Is the video tutorial on the use of electric facial care devices easy to understand?
2	Is the video tutorial on the use of electric facial care devices interesting and conducive to learning?
3	Is the material provided in this video tutorial on the use of electric facial care devices complete, clear, and well organized?
4	Does this video tutorial on using electric facial care tools help you better understand safety procedures when using electric tools?
5	Is this video tutorial on using electric facial care tools very useful in helping you practice using electric tools independently?
6	How relevant is this video tutorial on using electric facial care tools to your learning needs in the field of makeup?
7	Do you feel that this video tutorial increases your motivation to learn?
8	How effectively can you use this video tutorial as a reference for independent learning?
9	How effectively does the quality of the images and video presented help you understand the concept of using electric facial care tools properly?
10	Do you feel more prepared to use electric facial care tools after watching this video tutorial?

Table 1 is used to measure the practicality and usefulness of the Video Tutorial on the Use of Electric Skin Care Tools using a questionnaire consisting of ten questions.

The first question was to find out whether the tutorial videos were easy for students to understand. The results showed that students found them easy to understand because the simple and clear language used made the information easy to digest. The second question relates to interest in the learning videos presented in support of the learning process. The results of the responses to this aspect show that students are interested because of the attractive and high-quality visuals. The third question relates to the completeness and clarity of the material. The students' assessment results indicate that the material contained in the tutorial videos is complete, clear, and well-structured, from preparation to final application. This makes it easy for students to follow the process step by step without feeling confused.

The fourth question asked about students' understanding of safety procedures when using electrical appliances. The results showed that this video tutorial greatly helped students understand the safety procedures that must be followed when using these appliances. The explanations provided in the video were very clear and detailed, so that users felt more confident and secure when using these facial care appliances. The fifth question related to the usefulness of this video tutorial. The students' responses indicate that the video tutorial on the use of electric facial care tools has a positive impact in facilitating independent practice. This video tutorial is very useful because it can be accessed anytime and anywhere, giving students the flexibility to learn at their own pace and according to their own schedule. Students can watch and repeat the material as needed, allowing them to learn in a way that best suits their individual learning styles. This is very helpful in overcoming the difficulties encountered when learning how to use electric devices.

The sixth question concerns the relevance of the video to learning needs. The results show that this tutorial video is highly relevant to learning needs, as the material presented is in line with the curriculum and learning needs of students in the classroom. The tools used are also those available at the Unimed Cosmetology Education Laboratory. The seventh question concerns learning motivation. The students' responses indicate that the images and videos presented are interesting, so that students feel connected to the content. This can certainly increase motivation to learn and understand the concepts taught in the use of skin care tools with electrical appliances. The eighth question is to determine the effectiveness of this tutorial video as a reference for independent learning. Overall, student responses indicate that this tutorial video has high potential as a self- learning reference. With clear presentation, good practical demonstrations, accessibility, and relevance to learning needs, the tutorial video can be an effective tool to help students develop their skills and knowledge independently.

The ninth question relates to the effectiveness of the image and video quality presented. The results show that the image and video quality is good, allowing students to clearly and easily see the details of the tools and techniques used. The narration or explanation in the video is clear and easy to understand, making it easier for students to follow the instructions and understand the concept of using facial care tools with these electrical devices. Question ten concerns readiness in using electric facial care tools after watching this

tutorial video. The students' responses show that this tutorial video contributes to their sense of readiness to apply the skills they have learned. They gain a multisensory learning experience, making them feel more prepared for independent practice by applying the skills they have learned related to the use of electric facial care tools.

Discussion

The overall results of the questionnaire show that the Video Tutorial on the Use of Electric Skin Care Tools has a high level of practicality. With the video being compiled taking into account various aspects, this video tutorial is considered practical and suitable for use as a learning medium in the Electric Skin Care Tools course in the Cosmetology Education Study Program at State University of Medan.

Table 2. Questionnaire Assessment Results

Criteria	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total
Very Practical (5)	13	12	11	13	16	17	12	21	18	15	148
Practical (4)	15	18	17	16	17	24	22	12	15	19	175
Quite Practical (3)	6	4	6	5	1	3	0	0	1	0	26
Not Practical (2)	0	0	0	0	0	0	0	0	0	0	0
Very Impractical (1)	0	0	0	0	0	0	0	0	0	0	0

Based on the results shown in Table 2, it can be seen that the questionnaire used in this study consisted of 10 questions designed to provide a clear picture of the practicality of video tutorials in the context of learning how to use electric skin care devices. The respondents, who were students, assessed each aspect of the statement using a 5-point Likert scale. From the data obtained, the recapitulation of the scores from all respondents shows that the “very practical” category received 148 points, ‘practical’ received 175 points, “quite practical” received 26 points, while the “not practical” and “very impractical” categories each received 0 points. The total score obtained was 349 points.

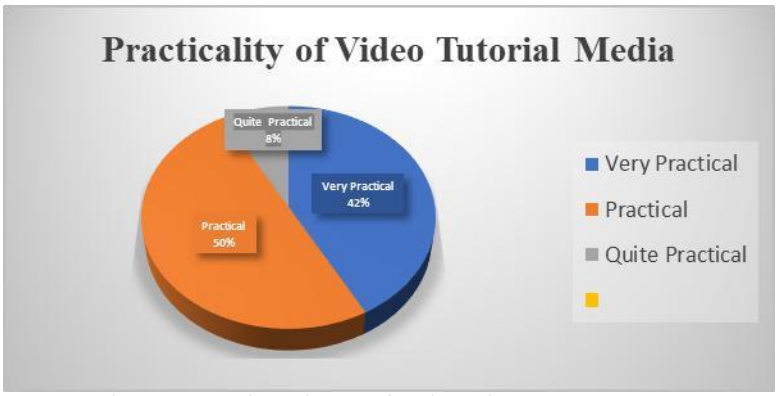

Figure 1. Questionnaire Results Figure in Percentage Form

Referring to Figure 1, which is a diagram of the survey results in percentage form, it can be concluded that most respondents gave positive assessments of the practicality of the video learning media used. A total of 42% stated that the video tutorials were “very practical,” while 50% of respondents rated the videos as “practical.” On the other hand, 8% of respondents felt that the video tutorials were “quite practical.” These results indicate that the majority of respondents felt that the video tutorials were practical, effective, and easy to use to support the learning process.

CONCLUSION

For the Cosmetology Education study program at the Faculty of Engineering, State University of Medan, as a study program that prioritizes skills, it is important to continue integrating technology into the learning process. Video tutorials can be used as digital learning media for material on the use of electric facial care tools. Based on the findings from the research on the practicality of video tutorials on the use of electric skin care tools among students of the Cosmetology Education program at the State University of Medan, it can be concluded that the learning media developed shows a fairly high level of practicality. The analysis results indicate that the majority of students (50%) consider the video tutorial to be a practical learning medium, while 42% of other students give a better rating, namely very practical. Only a small number of

students (8%) stated that the video tutorial was quite practical.

This assessment shows that tutorial videos on how to use facial care tools with the technology used are an appropriate and practical solution, making the learning atmosphere more varied and interesting, due to the accessibility and flexibility provided, which makes them easier to understand. The results of this analysis are expected to serve as a reference for educational institutions in designing more effective and interesting learning materials, as well as for educational content developers, especially in the field of makeup and beauty.

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