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Development of a Video Media Tutorial on Hair Cutting For Beauty Students at the Private Vocational School Gelora Jaya Nusantara

Dian Maya Sari[1*], Winna trivera Ginting[1], Mei Alsih Sihombing[1], Putri Chairina Zulfiani[1], Almaida Vebibina[1]
[1] Pendidikan Tata Rias, Universitas Negeri Medan, Indonesia
*Corresponding author email: dianmayasari@unimed.ac.id

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ABSTRACT

This research is motivated by the low results of students' practical work on the material of haircutting angles, where only 47.06% of students achieved the Minimum Completion Criteria (KKM). Students have difficulty in mastering basic hair cutting techniques, determining partings, and creating appropriate cutting patterns. In addition, the learning media used is still limited to PowerPoint and printed books so that it does not support optimal practical learning. This study aims to develop and determine the feasibility of video tutorial media for haircutting angles for grade XI students of Beauty Treatment at SMK Swasta Gelora Jaya Nusantara. The study used the R&D method with the ADDIE model. The research subjects consisted of 34 students, three material experts, and three media experts. Data collection techniques used a needs questionnaire, expert validation, and product trials. The results showed that the validation of material experts obtained a percentage of 98% and validation of media experts was 95.5% with a very feasible category. The results of student trials showed a percentage of 87% in the small group, 91% in the medium group, and 93% in the large group with a very good category. Thus, the developed video tutorial media is declared very suitable for use in learning hair cutting.

INTRODUCTIONS

The development of digital technology in the Industrial Revolution 4.0 era has had a significant impact on education, particularly on the learning process in Vocational High Schools (SMK). Technology is now a crucial element in improving the quality of learning through interactive and engaging media. Education focuses not only on intellectual aspects but also on developing skills relevant to the digital era and globalization (Suyadi, 2022). Modern human life is inseparable from technology because it plays a significant role in expanding access, enriching teaching methods, and increasing learning effectiveness (Gones et al., 2022). Integrating technology into learning is one effort to improve the quality of education through the use of more interactive, innovative media that suits the characteristics of 21st-century learners. Technology-based learning can help students gain more concrete, engaging, and understandable learning experiences, especially in practical subjects that require direct demonstrations. According to Mangesa, Miru, and Prasojo (2022), video tutorials can improve the activity and learning outcomes of vocational high school students because the material can be learned visually and repeated as needed. In addition,

the use of video media can also increase students' learning motivation and practical skills in vocational learning.

Vocational schools (SMK) as vocational educational institutions aim to produce competent, skilled, and career-ready graduates. One of the expertise programs at SMK is Beauty Care, which requires students to master practical skills such as hair care, hair styling, and hair cutting. Hair cutting competency is a fundamental skill that students must master because it is directly related to professional competence in the hair beauty field. During the practical learning process, students are not only required to understand the theory but also must be able to practice hair cutting techniques correctly according to work procedures and beauty industry standards.

However, the practical learning process in vocational schools still faces various obstacles, particularly the use of learning media that is not varied enough and does not support students' practical skills. Based on observations at the Gelora Jaya Nusantara Private Vocational School, learning to trim sideburns still uses media in the form of printed books, PowerPoint presentations, and live demonstrations by teachers. The use of these media is considered suboptimal because students have difficulty understanding the detailed hair trimming steps, especially in determining hair partings, cutting patterns, hair lifting angles, and correct cutting techniques. In addition, limited practice time means students have less opportunity to review the material independently. The impact of these conditions is evident in student learning outcomes that are still low, where as many as 47.06% of students have not achieved the Minimum Completion Criteria (KKM) in the material on trimming sideburns.

These issues indicate the need for more innovative and effective learning media to help students understand the practical process more clearly and systematically. One medium that can be used in practical learning is video tutorials. Video tutorials are audiovisual media capable of presenting practical steps concretely through moving images, sound, and text, making it easier for students to understand work procedures in detail. Video media is capable of displaying movements in detail and according to the needs of practical learning (Arsyad, 2022). According to Surur et al. (2024), videos can be used by teachers to develop innovative, more engaging and effective learning media. Adillah et al. (2023) added that incorporating video tutorials into learning can help students understand information quickly and efficiently. Video media can also increase motivation, strengthen conceptual understanding, and encourage students to actively participate in learning activities (Firmadani, 2021). According to Ramadany et al. (2021), the use of video tutorials in learning the uniform layer hair cutting technique was categorized as very feasible and effective for use as a practical learning medium in vocational schools. Video tutorials allow students to study the material repeatedly, thereby improving their understanding and practical skills.

Another study conducted by Aulia and Astuti (2024) showed that the development of video tutorial media for hair cutting and coloring subjects obtained a valid category and was very practical for use in the practical learning process of vocational high school students. Furthermore, Atmaka et al. (2024) stated that the use of video media for hair cutting materials using the uniform layer technique was able to improve learning outcomes and positive student responses to practical learning. This shows that video tutorial media has great potential in helping students understand practical skills more effectively than conventional learning media.

The development of video tutorials is also supported by Mayer's multimedia learning theory, which explains that learning is more effective when information is delivered through a combination of visuals and audio rather than solely through text or verbal explanations. Through video tutorials, students can observe the practical process directly, understand the sequence of work, and review the material at any time according to their learning needs. Therefore, video tutorials are highly suitable for practical learning in the field of Beauty Care, which requires detailed demonstrations of work steps.

In this study, video tutorial media was developed using Wondershare Filmora software. According to Saputra and Hidayat (2023), Filmora has a simple, easy-to-use interface and provides various features such as text, animation, transitions, and sound effects that make learning videos more engaging, resulting in more interactive and communicative learning media. The use of video tutorial media is expected to help students understand the technique of trimming sideburns more clearly, increase learning motivation, and support independent learning both in school and outside of class.

Based on this description, this study aims to develop video tutorial media for trimming sideburns for grade 11 Beauty students at SMK Swasta Gelora Jaya Nusantara using the ADDIE development model. This media development is expected to produce a suitable, effective, and engaging learning medium to improve students' understanding and practical skills in trimming sideburns.

RESEARCH METHOD

This study used the Research and Development (R&D) method with the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) development model. The R&D method is a research method used to produce specific products and test their feasibility for use in the learning process (Sugiyono, 2023). The ADDIE model was chosen because it has systematic stages and is suitable for use in developing technology-based learning media. According to Cahyadi (2019), the ADDIE model is effective for use in developing learning media because each stage is interconnected and oriented towards continuous product improvement.

This research was conducted at SMK Swasta Gelora Jaya Nusantara in the even semester of the 2024/2025 academic year. The research subjects consisted of material experts, media experts, subject teachers, and 34 grade XI Beauty students. The material experts consisted of one lecturer of Makeup Education at Medan State University and two Beauty teachers at SMK Swasta Gelora Jaya Nusantara. Meanwhile, the media experts consisted of three lecturers from the Faculty of Engineering, Medan State University who have competencies in the field of media and learning technology. The object of this research is learning media in the form of a video tutorial on cutting side hair developed using Wondershare Filmora software.

The first stage in this research is Analysis. At this stage, a needs analysis was conducted through observation and interviews with hairdressing subject teachers to identify problems that occurred in the learning process. In addition, the researcher also distributed needs questionnaires to teachers and students to determine the need for video tutorial learning media. The results of the analysis showed that students experienced difficulties in understanding the technique of haircutting, especially in determining the correct hair parting, cutting patterns, and hair cutting techniques. According to Branch (2009), the analysis stage in the ADDIE model aims to identify learning needs, student characteristics, and problems

that occur in the learning process so that the product developed is in accordance with user needs.

The second stage is design. In this stage, the researcher designed a video tutorial media for cutting side-swept hair based on the results of the needs analysis. The design was carried out by compiling learning objectives, learning materials, storyboards, flowcharts, and media display designs. The materials compiled included an introduction to tools and materials, hair parting techniques, steps for cutting side-swept hair, and the final result of the haircut. According to Tegeh and Kirna (2013), the design stage aims to systematically structure the learning media so that the resulting product is more effective, attractive, and in accordance with learning objectives.

The third stage is development. At this stage, the video tutorial production process is carried out using Wondershare Filmora. After the media is developed, product validation is conducted by material experts and media experts to determine the level of suitability of the learning media. The material expert validation covers aspects of content, presentation, and language suitability, while the media expert validation covers aspects of appearance, programming, audio quality, visuals, and ease of use of the media. The validators' suggestions and input are used as the basis for revising the media before implementation with students. According to Ramadany, Suhartiningsih, Pritasari, and Wilujeng (2021), expert validation in learning media development is crucial to ensure the developed media meets practical learning needs and is suitable for use in the teaching and learning process.

The fourth stage is Implementation. At this stage, the video tutorial media that has been declared suitable is tested on grade XI Beauty Treatment students of SMK Swasta Gelora Jaya Nusantara. The trial is carried out in stages, namely small group trials, medium group trials, and large group trials. In the implementation process, students use the video tutorial media in learning about hair cutting practices, then students are asked to fill out an assessment questionnaire to determine student responses to the developed media. According to Molenda (2015), the implementation stage aims to determine the effectiveness of media use in real learning situations so that the advantages and disadvantages of the developed product can be identified.

The final stage is evaluation. Evaluation is conducted to determine the suitability of the video tutorial media based on expert validation and student trials. Formative evaluation is conducted at each stage of development to address media deficiencies and ensure the resulting product is more effective and meets learning needs. According to Dick and Carey (2015), formative evaluation aims to obtain information that can be used as a basis for product improvements before widespread use in learning.

The data collection techniques in this study used observation, interviews, and questionnaires. Observations and interviews were conducted to obtain information regarding learning conditions and learning media needs in schools. The questionnaire was used to collect data from subject matter expert validation, media expert validation, and student responses to the developed video tutorial media. The research instrument used a Likert scale with five response alternatives: very good, good, sufficient, poor, and very poor. According to Arikunto (2022), a Likert scale is used to systematically measure respondents' attitudes, perceptions, and assessments of a research object.

The data analysis technique used was quantitative descriptive analysis. Data obtained from expert validation and student trials were calculated using the following percentage formula:

$$P = \frac{\sum}{N} X\ 100\%$$

Note:
P : Feasibility presentation
∑ : Total Score
N : Maximum Total Score

RESEARCH FINDINGS AND DISCUSSION

Research Findings

This research is a research and development (R&D) study. The development model used in this study is the ADDIE model, which consists of analysis, design, development, implementation, and evaluation.

Based on observations, it was found that the learning process still uses modules and PowerPoint (PPT), while video tutorials have never been used. Teachers reported that students often experience difficulty in creating precise hair partings, determining cutting patterns, and producing less-than-perfect haircuts. Furthermore, limited practice time results in less than optimal opportunities for students to practice.

The analysis results show that 47.06% or 16 out of 34 students have not achieved the Minimum Completion Criteria (KKM) for the topic of trimming sideburns. This indicates the need to develop more innovative learning media. Based on the needs questionnaire, both teachers and students assessed that video tutorial-based learning media is very necessary to clarify the steps for trimming sideburns and improve students' practical skills. This can be seen in the table of results of the student and teacher needs questionnaire as follows.

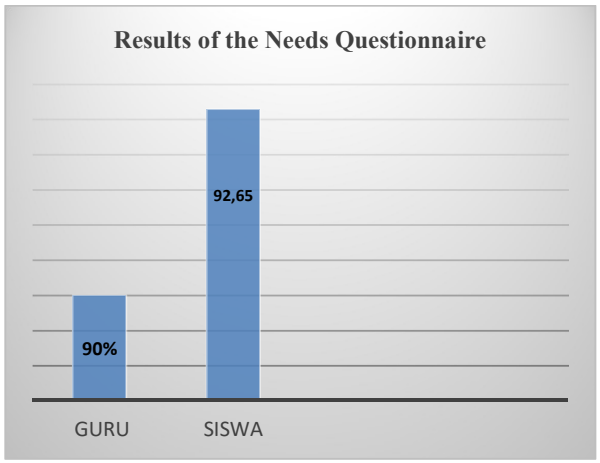

Figure 1. Results of the Needs Questionnaire

The design stage is carried out after the analysis process to design a product development in the form of a video tutorial on haircutting. According to Risal et al. (2022), the design stage in the ADDIE model includes planning learning components, such as compiling materials, developing learning strategies, and designing evaluation tools used in the learning process. This stage serves to ensure the developed media meets the needs of students and the desired learning objectives.

Based on the results of the needs analysis, the researchers designed a video tutorial media containing material on cutting side-swept hair for grade XI Beauty students at Gelora Jaya Nusantara Private Vocational School. The design began with establishing learning objectives, namely for students to be able to understand and practice basic side-swept hair cutting techniques with results that meet beauty industry standards.

Next, core material was selected based on learning outcomes for the odd semester of the 2024/2025 academic year, covering an introduction to tools and materials, parting steps, angled hair cutting techniques, and the final haircut. The media design was presented in the form of a storyboard as a visual guide during the video recording process, systematically depicting each stage of the haircut.In addition, the researchers also compiled a flowchart explaining the media development process, from planning, recording, editing using Wondershare Filmora, to validation by experts.

In the development stage, validation was carried out by material experts and media experts who had been validated. Media validation is an activity for designing a product from video learning media that is suitable for use. Based on the expert opinions above, the assessment in this study was carried out by experts in the field of educational technology who were then asked to provide input. Validation by media experts with three media experts competent in media assessment from the Faculty of Engineering, State University of Medan.

The product revision stage involves improving the initial product. Revisions are made based on validation results from experts. After product revisions, the learning media product can be used by students.

1). Material Validation

The material development stage is the initial stage before producing a learning video. This stage begins with developing the designed material into a complete material that aligns with the ATP and the Teaching Module. After the material is developed, it will be validated by material experts until the material is declared valid. This validation was carried out by three material experts: one lecturer from the Makeup Education Department of Medan State University and two teachers from Gelora Jaya Nusantara Private Vocational School, according to their respective fields. The data obtained are as follows:

Table 1. Validation Results by Material Experts

No	Rated aspect	Percentage (%)	Category
1	Content Eligibility	97	Very Worthy
2	Presentation	97	Very Worthy
3	Linguistics	100	Very Worthy
	Average	**99**	**Very Worthy**

The results of the material expert validation of the video tutorial on haircutting showed that the content feasibility aspect obtained a score of 97%, the presentation aspect 97%, and the language aspect 100%, all in the Very Feasible category. Overall, the average validation result reached 98% in the Very Feasible category. The results of the study can be seen in the following diagram.

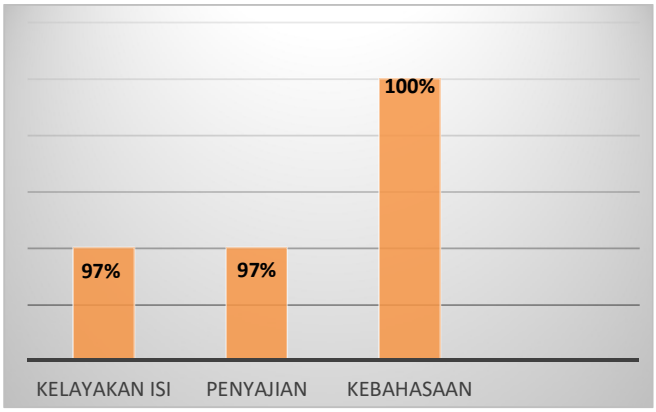

Figure 3. Material Validation Results

2). Media Expert Validation

Media validation was conducted by three experts with expertise in their respective fields (Sugiono, 2023). Validators from the Faculty of Engineering, State University of Medan, provided a score for each aspect assessed, including presentation and programming aspects. They also provided conclusions regarding the media's suitability, along with suggestions for improvements. The assessment results from the three media experts are presented in the following table.

Table 2. Validation Results by Media Experts

No	Rated aspect	Percentage (%)	Category
1	Presentation Eligibility	95	Very Worthy
2	Programming	96	Very Worthy
	Average	**95,5**	**Very Worthy**

The results of media expert validation of the video tutorial media showed that the presentation feasibility aspect obtained a score of 95%, and the programming aspect 96%, both included in the Very Feasible category. Overall, the average media expert validation result reached 95.5%, categorized as Very Feasible. The research results can be seen in the following diagram.

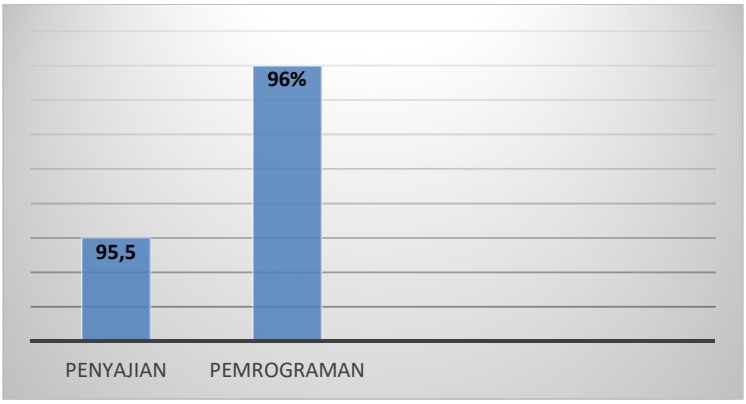

Figure 4. Media Validation Results

3) Product Revision

The product revision stage is the next step after the validation process by material experts and media experts is complete. This revision aims to refine the video tutorial learning media to align with the experts' suggestions and input, thereby making the product more effective and engaging when used in the learning process.

a. Material Expert Revision

Based on the research objective, which is to produce media worthy of revision by subject matter experts, this can be seen in the explanation below:

Table 3. Data from Material Expert Revision Results

Subject Matter Expert	No	Comment
I	1	In the learning objectives section, three points are made, starting with students being able to explain the basic concept of hair cutting, continuing with the cutting process, and ending with hair styling.
II	1	The images in the material have been corrected and adjusted, especially in the pruning steps section.
	2	Reduce unused tools in haircutting.
III	1	The arrangement of tools, materials and cosmetics must be arranged according to the stages of the hair cutting procedure.

b. Media Expert Revision

Media Expert Revisions are based on the research objective, which is to produce media worthy of revision by media experts. This can be seen in the explanation below:

Table 4. Media Expert Revision Results Data

Media Expert	No	Comment
I	1	The initial appearance and background are made more attractive.
	2	Developer voice clarified.
	3	The star icon is adjusted so that it does not obstruct the text.
	4	The white color of the material of tools, materials, linen and cosmetics is removed.
	5	Add a description in the personal preparation section.
	6	Added dubbing regarding the hair parting function.
	7	Add developer profile at the end.
II	1	Sentence and cover slide corrections.
	2	The logo remains in position until the end of the video.
	3	Dubbing only on the core or conclusion part.
	4	The developer profile at the end is made in narrative form.

5. Implementation Stage

The implementation phase is the process of applying learning media deemed suitable by experts to actual learning activities. The purpose of this phase is to determine the effectiveness of video tutorials on hair cutting in improving students' understanding and skills in hair cutting practices.

The trial was conducted at Gelora Jaya Nusantara Private Vocational School for 11th-grade Beauty students, with face-to-face sessions in the hairdressing practice room. The trial was conducted in three stages: small group trials, medium group trials, and large group trials.

During the activity, students learned the stages of haircutting through a video tutorial developed, covering the steps for preparing tools and materials, parting techniques, the trimming process, and the final haircut. After completing the learning activity, students completed a trial questionnaire to assess the appearance, ease of use, clarity, and usefulness of the learning media.

Table 5. Student Trial

Trial Phase	Percentage (%)	Category
Small Group	87	Very Worthy
Medium Group	91	Very Worthy
Large Group	93	Very Worthy
Average	**90,3**	**Very Worthy**

Based on the table above, the overall trial results by Grade XI Beauty students of SMK Swasta Gelora Jaya Nusantara on video tutorial media are obtained, namely in the small group trial of 87% with the category "Very Appropriate", the medium group trial of 91% with the category "Very Appropriate", and the large group trial of 93% with the category "Very Appropriate". Based on the calculation results, the overall average percentage is 90.33% with the category "Very Appropriate" with an interval of 81% - 100%. The following is the result of the validation by material experts in the form of a bar chart

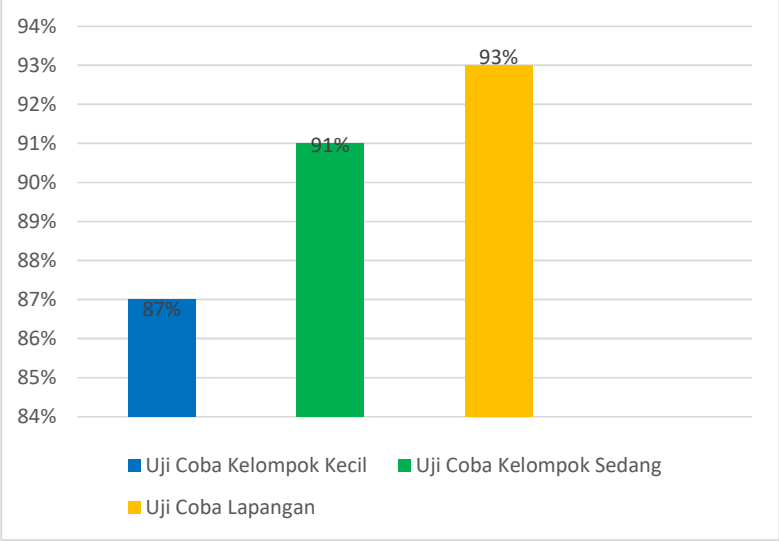

Figure 5. Results of the Group Trial

Discussion

The results of the study showed that the developed video tutorial media for cutting side hair obtained a very feasible category based on the assessment of material experts, media experts, and student trial results. The validation of material experts obtained a percentage of 98% with a very feasible category, while the validation of media experts obtained a percentage of 95.5% with a very feasible category. In addition, the results of large group trials obtained a percentage of 93% with a very good category. The high percentage indicates that the developed video tutorial media is able to meet the needs of practical learning for grade XI Beauty students of SMK Swasta Gelora Jaya Nusantara.

The success of the video tutorial in this study is supported by Mayer's (2021) Multimedia Learning theory. This theory explains that learning will be more effective when information is presented through a combination of text, audio, images, animation, and video, as it can facilitate the simultaneous processing of information in students' visual and auditory memory. In this study, the video tutorial combined hairdressing demonstrations, explanatory text, voiceover, and supporting animations, making it easier for students to understand each stage of hairdressing in detail and systematically.

The research also showed that video tutorials helped students understand practical steps independently. This was evident in the increasing positive student response to the media used. According to Munir (2022), digital learning media provides students with learning flexibility because it can be accessed anytime and studied repeatedly as needed. In practical learning, such as hairdressing, the ability to review material is crucial for students to better understand work procedures and reduce errors in practice.

Furthermore, the use of video tutorials in this study significantly increased student motivation. During the implementation process, students appeared more active and enthusiastic in participating in the learning process compared to those using PowerPoint presentations and live demonstrations. This finding aligns with research by Kay (2012), which found that video tutorials can increase student engagement, motivation, and understanding because the presentation of the material is more engaging and easier to understand. The use of audiovisual media also helps students maintain focus longer than conventional learning.

Video tutorials have several advantages over conventional learning media. First, they can be replayed, allowing students to review any steps they may not yet understand. Second, videos can display detailed practical movements, making it easier for students to grasp hair cutting techniques correctly. Third, the combination of visuals and audio helps students grasp learning concepts more concretely. According to Smaldino, Lowther, and Russell (2019), audiovisual media is highly effective in skills learning because it can demonstrate work processes in a realistic and systematic way.

Media development using Wondershare Filmora also contributes to the quality of learning media. Wondershare Filmora provides various features such as animation, transitions, text, dubbing, and sound effects that can enhance the visual quality of video tutorials. An engaging media presentation makes students more interested in learning and increases their attention during the learning process. This aligns with Arsyad's (2022) opinion, which states that engaging learning media can increase students' attention and motivation, thus making learning more effective.

The results of this study align with previous research conducted by Prasetyo and Lestari (2023), which showed that the use of video tutorials in vocational high school

practical learning significantly improved student skills. Firmadani's (2021) research also demonstrated that video media effectively improves student learning outcomes because students can repeatedly observe practical procedures and more easily understand the learning material. Furthermore, research by Giannakos (2013) stated that instructional videos provide a more interactive learning experience and increase student engagement in the learning process.

The research findings indicate that video tutorials not only serve as a tool to assist teachers in delivering material but also as a resource for independent learning for students. Students can utilize video tutorials to learn outside of class hours, thereby optimally developing practical skills. This demonstrates the relevance of using video tutorials in vocational education, which focuses on mastering work skills.

The implications of this research suggest that developing video tutorial-based learning media could be an alternative solution to improve the quality of practical learning in vocational schools (SMK), particularly in Beauty Care programs. The use of digital-based media also supports the transformation of 21st-century education, which emphasizes creativity, independent learning, and the use of technology in learning. Therefore, video tutorials can be further developed for other practical materials to support more innovative and effective learning.

CONCLUSION

Based on the research and development of a video tutorial for trimming side-sleeved hair using the ADDIE model, it can be concluded that the resulting product meets the eligibility criteria as a valid, practical, and suitable learning medium for use in the Haircutting subject in grade XI Beauty Care at SMK Swasta Gelora Jaya Nusantara. The validation results by material experts showed a very high feasibility level, with an average of 99.67%, covering aspects of content, presentation, and language. Meanwhile, the validation results by media experts obtained an average of 95.5%, categorized as very feasible, indicating that this video tutorial media meets the design, display, and programming aspects that align with the principles of effective learning media. Furthermore, the results of user trials by students also showed a very positive response, with an average percentage of 90.33%, indicating that this video tutorial media is easy to use, engaging, and capable of improving students' understanding and skills in systematically practicing trimming side-sleeved hair.

Thus, the developed video tutorial media is not only theoretically feasible based on expert validation but also empirically feasible based on field trials. This indicates that this media has the potential to increase the effectiveness of practical learning, particularly in helping students understand the technical steps of hair cutting more clearly, structured, and independently.

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