



Developing CapCut-Based Video Tutorials for Learning Outcomes in Creative Product and Entrepreneurship

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Abstract

This research is motivated by the absence of video tutorial-based learning media for creating headpieces in the Creative Product and Entrepreneurship course. The printed modules and YouTube links provided by teachers have not effectively enhanced students understanding. Therefore, this study aims to: 1) develop CapCut-based video tutorial learning media, 2) analyze the feasibility of CapCut-based video tutorial learning media, 3) analyze the differences in student learning outcomes after implementing the media, and 4) evaluate the effectiveness of CapCut-based video tutorial learning media on students learning achievements.

This research employs the Borg and Gall development model with 10 stages. The study subjects consist of 69 students from the Beauty and SPA vocational program. The analysis focuses on CapCut video tutorials for creating floral themed fantasy headpieces using plastic waste. The instruments used include observation sheets, questionnaires, and tests. The results indicate that CapCut-based video tutorial media are user-friendly, engaging, and capable of increasing student learning motivation. Based on evaluations by media and subject matter experts, the media are considered highly feasible. The independent sample t-test results reveal a significant difference in students learning outcomes before and after using the CapCut-based video tutorials. The average N-Gain was 87.4% in the experimental class and 24% in the control class, demonstrating the effectiveness of this learning media in improving student learning outcomes.

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INTRODUCTION

Vocational High Schools are educational institutions designed to equip students with knowledge and skills aligned with their chosen vocational competencies to prepare them for the workforce. According to Edi et al. (2017), vocational education aims to prepare students for specific skill-oriented fields. One such field is Beauty and SPA, which continually adapts to trends and technological advancements. Consequently, teaching methods and learning media are continuously innovated to enhance understanding, motivation, and skills among students.

The Creative Product and Entrepreneurship course in the Beauty and SPA program can incorporate video tutorial media in its teaching process. Video tutorials play a role in developing students foundational skills, which are crucial for preparing them as competent graduates (Brown-Martin, 2017). This course teaches students entrepreneurial skills, such as preparing to become entrepreneurs and creating marketable creative products in the beauty field. Examples of creative products for entrepreneurial ideas include flower bouquets, soap, herbal drinks, and jewelry made from plastic waste.

The product creation materials in the Creative Product and Entrepreneurship course require students to think creatively in designing, planning, and producing aesthetically and commercially valuable products. Video tutorials are often used as instructional tools in this course because they effectively deliver material and reduce students boredom. Video tutorials typically take the form of recorded demonstrations showing how to complete tasks, accompanied by instructional narration explaining each step (Lamontagne et al., 2021).

The benefits of video tutorials include providing consistent information delivery, effectively explaining processes, overcoming spatial and temporal limitations, and allowing for playback or pausing as needed (Febi Nuraini et al., 2022). According to Liao (2019), instructional media applications consist of interconnected elements designed for specific tasks and developed to simplify and accelerate the learning experience without burdening users.

CapCut is a video editing application for creating interactive educational videos, offering various features, templates, elements, and comprehensive transition effects (Priandini et al., 2023). This application was chosen as the video tutorial editing software because it can enhance students motivation and skills in the Creative Product and Entrepreneurship course. CapCut also enables video tutorials to be replayed, supporting students independent learning anytime and anywhere. Based on observations and interviews with teachers, the average learning outcome score of 11th-grade students in the Beauty and SPA program has reached the passing grade criterion, which is 83.5.

However, a significant challenge is the lack of video tutorial-based learning media in the Creative Product and Entrepreneurship course, specifically regarding repurposing plastic waste into headpieces. Such media could help improve students skills. Headpieces were selected as the video tutorial topic because they are simple to make, use economical and readily available materials, and serve as an entrepreneurial inspiration in the beauty field.

Interviews with students revealed that printed modules or handouts used in learning are often considered monotonous because they contain only images and written instructions. While YouTube offers video tutorials, they often lack clarity, detail, and consistent resolution. In contrast, instructional materials delivered via CapCut video tutorials can improve students understanding because they provide structured and detailed content with high resolution, stability, and engaging animations, transitions, and visuals.

The Creative Product and Entrepreneurship course requires students to create innovative beauty-related products for sale while fostering entrepreneurial spirit. Within the seventh learning objective, students are expected to prepare products for marketing. However, there is currently no learning media available for creating headpieces using CapCut-based video tutorials. Research by Febriandiwa and Ridwan (2021) indicates that video tutorial-based learning media are highly effective and suitable for teaching Creative Product and Entrepreneurship courses.

This demonstrates that CapCut, as an editing software, supports the creation of engaging educational videos that capture students attention and enhance their learning outcomes. Based on the above discussion, this study aims to develop CapCut-based video tutorial learning media for the Creative Product and Entrepreneurship course, analyze the feasibility of such media, examine the differences in students learning outcomes after using the video tutorials, and evaluate the effectiveness of CapCut-based video tutorial learning media in improving learning outcomes for the course.

METHOD

This study is a research and development study using the Borg and Gall model. Following the development model applied, the research procedure consists of ten stages: preliminary study, planning, initial product development, initial field testing, main product revision, main field testing, operational product revision, operational field testing, final product revision, and dissemination and implementation.

The study was conducted with a sample of 11th-grade students in the Beauty and SPA program at SMKN 1 Salatiga, comprising 69 students divided into two classes: a control class and an experimental class. The research was carried out in the Creative Product and Entrepreneurship course over three meetings. Data collection techniques used in this study included observation results, interviews, questionnaires, and research documentation.

Data analysis in this study employed descriptive percentage analysis for the feasibility test results, validity and reliability tests for the observation sheets and questionnaires, normality and homogeneity tests, t-tests, and N-Gain tests for student learning outcomes.

RESULT AND DISCUSSION

Development of Media

During the preliminary study phase, the researcher identified problems in the Creative Product and Entrepreneurship course. Observations revealed that teachers used printed modules and YouTube as teaching media.

However, the video tutorials used by students on YouTube were not optimal for learning.

Based on interviews with teachers and students regarding the challenges faced during the Creative Product and Entrepreneurship course, students were required to create innovative products. However, they struggled because, when directed by teachers to create headpiece accessories independently, no video tutorials comprehensively showed the process of making headpieces from economical materials such as plastic waste. Teachers hoped that CapCut-based video tutorials on creating headpieces from plastic waste could help students understand the steps more thoroughly.

The researcher analyzed students needs by reviewing their perspectives and assessing the minimum competencies they were required to achieve, following the learning objectives set by the teacher. This study focused on the seventh learning objective under the production element, which required students to create products, determine production strategies, and market headpiece products.

During the planning phase, the researcher designed learning media and ensured the necessary resources for the study. Steps included conceptualizing the media and verifying that sufficient storage space was available on devices to save the edited videos.

The researcher then formulated the content for the Creative Product and Entrepreneurship course by consulting with 11th-grade teachers in the Beauty and SPA program regarding the theme "Floral Headpiece." This theme focused on floral elements such as flowers, leaves, stems, and roots.

White and red roses can be made from shopping plastic bags, which are repurposed as raw materials for creating plastic waste accessories. The tools and materials required for making roses from shopping plastic bags include scissors, sewing thread, floral wire, ¼ of a skewer stick, and glitter nail polish. Plastic Leafage is a collection of leaves made from used plastic water bottles, which can produce leaf shapes derived from the bottle body. The tools and materials required include used plastic bottles, a cutter, scissors, and nail polish.

Artificial Flowers can be created from the bottom or base of plastic bottles previously cut in

two for making artificial leafage. The bottom part can be repurposed into flower shapes by cutting petal patterns with scissors and bending each petal upward to create a raised effect. Modified Sunflowers can be made from used drinking straws that have been cleaned. They can be shaped into various types of flowers, including sunflowers, which do not necessarily need to have orange and yellow base colors.

Lavender can be created from colored plastic straws, which can be crafted into lavender flower shapes. The technique is similar to making mini flowers, but the difference lies in trimming 1/4 of the straw to leave green and yellow sections for the leaves. Similarly, mini flowers can be made from plastic straws, with cotton buds used as supports for the flowers.

During the initial product development phase, activities included creating a flowchart, storyboard, and product assessment instruments. The flowchart outlined the steps for developing the initial product:

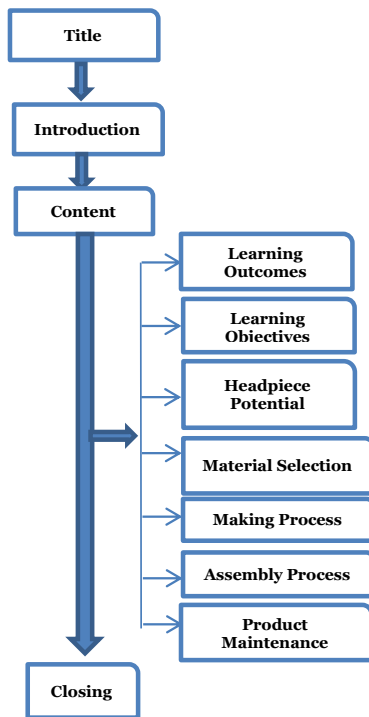


Figure 1. Flowchart

The storyboard in this study represents the overall learning media to be included and serves to facilitate the process of creating the media. The following is the storyboard from the initial product development stage:

a) Scene Cover



Figure 2. Scene Cover

b) Introduction



Figure 3. Introduction scene

c) Presentation of learning elements, outcomes, and objectives



Figure 4. Learning Elements



Figure 5. Learning Objectives

d) Definition and Potential of Headpieces



Figure 6. Definition and Potential of Headpieces

e) Selection of Plastic Materials for Headpieces

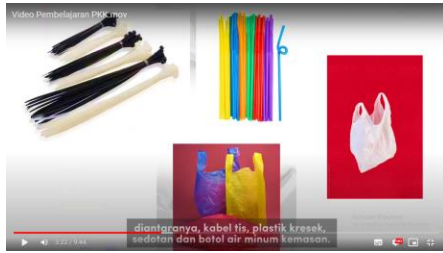


Figure 7. Types of Plastic

Explanation and guidance regarding which types of plastic are easy to shape and which types should not be used as raw materials for making headpieces.



Figure 8. List of Video Tutorials

Displays the list of video tutorials to be shown.

f) Tools and Materials for Making Headpieces

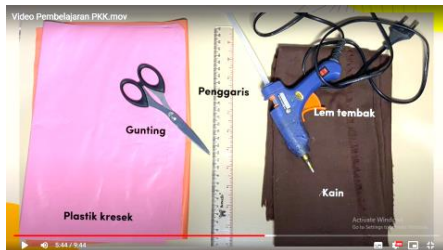


Figure 9. Tools and Materials

g) How to Create Headpiece Elements



Figure 10. Tutorial on Making Lavender



Figure 11. Tutorial on Making Plastic Leafage

h) How to Assemble a Headpiece



Figure 12. Tutorial on Assembling a Fancy Crown

Shows the steps for assembling a headpiece through to the finishing process.

i) Product Maintenance



Figure 13. Tips for Product Maintenance

Explains tips for properly maintaining headpieces to prevent deformation and discoloration.

j) Closing

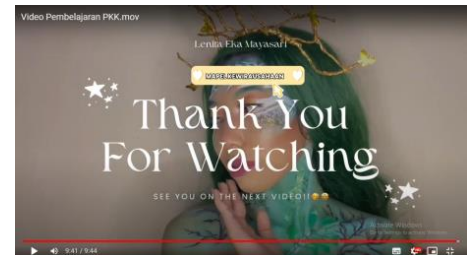


Figure 14. Closing Scene

In the initial trial phase, the researcher conducted validation of the media and learning materials with experts. The evaluation sheet for the learning video by media experts included 2 aspects, 4 indicators, and 19 statements. Meanwhile, the evaluation sheet for the learning material had 2 aspects, 4 indicators, and 17 statements. Validation was carried out by two experts, one from the Balai Besar Guru Penggerak of DIY Province under the Ministry of Education and Culture, and the other from Puspita Martha International Beauty School.

During the main product revision stage, the researcher received assessments and suggestions for improvement from the experts. Suggestions from the media expert during the first stage included replacing the video tutorial list with animations to make it more engaging and changing the video closing segment to more interesting content instead of just saying "Thank You." It was also recommended to use a landscape frame with a solid-colored background to make the video more visually comfortable.

In the first stage of assessment, the content expert suggested adding snapshots of the headpiece worn by the model before or during the video closing to make it more engaging and easier for students to understand. Additionally, it was recommended to include one or two points about the potential of headpieces as ideas for creative and entrepreneurial products. The researcher then revised the media based on these suggestions.

Media Feasibility Analysis

After improving the media, in the second evaluation phase, experts stated that the CapCut-based video tutorial learning media was highly feasible for trials. The evaluation scores from the two media experts were 74 and 75, respectively. According to the Likert scale interval, both scores fall into the highly feasible category. Similarly, the evaluation scores from the subject matter experts were 63 and 63, which, based on the Likert scale interval, also fall into the highly feasible category for use in the Creative Product and Entrepreneurship course.

1. Content Validity Test

The evaluations by the experts were then subjected to a content validity test. Content validity is an evaluation process aimed at ensuring

that the questionnaire content aligns with the research objectives, conducted by experts in the related field (Dwi Puspitasari & Febrinita, 2021). In this study, content validity was calculated using Aiken's formula. The validation results for the questionnaire instruments from the two media experts showed a variance of 0.973, and the results from the two subject matter experts showed a variance of 0.950, both falling into the high category.

2. Reliability Test

After the content validity test, a reliability test was conducted using the Intraclass Correlation Coefficient (ICC) formula. The reliability test results showed that the media expert's average measures score was $0.658 > 0.6$, and the subject matter expert's average measures score was $0.789 > 0.6$. This indicates that the reliability of the media feasibility observation sheets and CapCut-based video tutorial learning materials was categorized as reliable with good agreement.

The main field trials were conducted in the 11th-grade Beauty and SPA program at SMKN 1 Salatiga with 30 students. Challenges and feedback from students were used for further revisions. Some challenges encountered included full Google Drive storage capacity and limited internet access with unstable signals.

3. Construct Validity Test

After the main field trials, the researcher analyzed the results of the student response questionnaires using a construct validity test, which measures how well the research instrument reveals the abilities or theoretical constructs it is intended to measure (Retnawati, 2017). In this study, the construct validity test was conducted using the Exploratory Factor Analysis (EFA) formula, which resulted in a KMO value of $0.866 > 0.5$, indicating that the sample size used in this study was sufficient for factor analysis.

In the operational product revision phase, the researcher revised the product based on the feedback received. To address limited internet access, the researcher provided a hotspot facility for some students or grouped students, where the group leader could share the video via Bluetooth with members who had difficulty downloading it. Regarding storage capacity issues, the researcher

used backup email accounts with available storage.

In the operational field trials, testing was conducted with a larger sample to ensure that the CapCut-based video tutorial media performed as expected. The trials were held at SMKN 1 Salatiga in the 11th-grade Beauty and SPA program, involving 33 students in the experimental class. These trials took place during the third session for the post-test, with only two students encountering difficulties downloading the video, which was resolved using mobile hotspots provided by their group mates. In the final product revision phase, the results indicated that the CapCut-based video tutorial learning media was suitable for use in the Creative Product and Entrepreneurship course for 11th-grade Beauty and SPA students. Students faced no significant issues using the learning video, so no further revisions were needed.

The final stage involved dissemination and implementation, conducted over three sessions of the Creative Product and Entrepreneurship course for 11th-grade CA 1 and CA 2, with students divided into groups. The learning model applied in this study was project-based learning (PBL).

Chiu (2020) stated that project-based learning (PBL) is a collaborative approach to teaching and learning where students are presented with real-world problems and practices. This process involves a series of complex tasks that stimulate students critical thinking as they work on a project.

In 11th-grade CA 1, the video tutorial was shared via a Google Drive link, allowing students to access it on their devices. After watching the video, students were tasked with creating a Lastpiece product based on their design drawn on A4 paper.

They documented, presented, and evaluated their work and subsequently completed a questionnaire via Google Forms. Based on the data, the research results showed that 61% of the evaluations fell into the highly feasible category, and 39% into the feasible category.

Questionnaire Reliability Test

The student response questionnaire was then subjected to a reliability test. In this study,

reliability was calculated using Cronbach Alpha formula. Cronbach Alpha is a standard used to measure the internal consistency of a measurement instrument, such as a questionnaire. The Cronbach Alpha value was $0.954 > 0.60$, indicating that all questionnaire items were reliable and consistent.

To measure the improvement in students skills resulting from the use of CapCut-based learning media, the researcher conducted a t-test analysis, preceded by prerequisite tests including normality and homogeneity tests.

Analysis of Differences in Student Learning Outcomes

Based on the implementation of CapCut-based video tutorial learning media in the Creative Product and Entrepreneurship course, there were differences in students learning outcomes before and after the treatment. The data analyzed included pre-test and post-test scores.

The control class had an average pre-test score of 75.50 and a post-test score of 81.50. Meanwhile, the experimental class had an average pre-test score of 82.06 and a post-test score of 87.36. The data showed that the average post-test scores of the control and experimental classes were different. To determine whether the difference between the two classes was significant, further statistical tests were conducted.

1. Normality Test

According to Sintia et al. (2022), a normality test is used to determine whether the data distribution is normal. The Kolmogorov-Smirnov normality test results showed $\text{Sig} > \alpha$ ($0.200 > 0.05$) for both the control and experimental classes, indicating that the pre-test and post-test data were normally distributed.

2. Homogeneity Test

After confirming that the pre-test and post-test data were normally distributed, a homogeneity test was conducted to determine whether the samples came from populations with the same variance (Usmadi, 2020). The pre-test homogeneity test for the control and experimental classes resulted in $\text{Sig} > \alpha$ ($0.987 > 0.05$). The post-test homogeneity test also resulted in $\text{Sig} > \alpha$ ($0.951 > 0.05$), indicating that the pre-test and

post-test data for both classes came from populations with homogeneous variances.

3. Independent Sample t-Test

Since the pre-test and post-test scores for the control and experimental classes were normally distributed and homogeneous, further parametric testing was conducted using an independent sample t-test. The results showed that $\text{Sig} < \alpha = 0.05$ ($0.000 < 0.05$), indicating a significant difference between the post-test scores of the experimental and control classes.

Analysis of the Effectiveness of Video Tutorial Learning Media

After confirming the normality and homogeneity of the pre-test and post-test data, as well as a significant difference in the independent sample t-test, the N-Gain score for both the control and experimental classes was calculated using SPSS version 26.0. The experimental class had an N-Gain score of 87.387 or 87.4%, indicating a high and effective improvement in learning outcomes. The control class had an N-Gain score of 24.086 or 24%, indicating a low and less effective improvement in learning outcomes.

DISCUSSION

Development of CapCut Media

The CapCut-based video tutorial learning media was developed through a series of stages based on Borg and Gall's research and development model. The researcher carried out all stages, starting from the initial planning phase by gathering information from observations and interviews with teachers and students. Currently, printed handouts and video tutorials accessed by students on YouTube have not been effective for optimal learning due to incomplete instructions, lack of detailed explanations, absence of engaging animations, and unstable resolution. Additionally, no video tutorial demonstrates the creation of Lastpiece, a headpiece product made from plastic waste, as an idea for creative products and entrepreneurship. Observations revealed that the methods used by teachers in Creative Product and Entrepreneurship lessons include lectures, discussions, and assignments.

The methods applied simply involve explaining the material in front of the class,

causing students to feel bored since the learning media fails to capture their attention. Students show relatively passive behavior during learning because the media used is not interactive, making it difficult for them to create creative products without concrete examples.

The researcher then analyzed the needs of students to identify problems they face in Creative Product and Entrepreneurship lessons. Observations and interviews revealed that students struggled to understand teachers' explanations because demonstrations were only shared through YouTube links, without direct examples provided by teachers.

In creating creative products, students have not yet received a video tutorial that provides detailed guidance on making accessory elements and assembling them. Although similar headpiece-making tutorials exist on YouTube, they often skip important steps, leaving students confused, and the resolution of the videos is not clear enough to watch. Students hoped for engaging learning media with well-structured and detailed tutorials, stable resolution, and frame rates, enabling them to feel more motivated and enhance their skills in creating innovative products for Creative Product and Entrepreneurship lessons.

During the planning stage, the researcher designed the learning media, starting by downloading the CapCut editing application, creating an account, and exploring free features. The researcher selected suitable font styles, stickers, animations, and transitions to capture students' attention. In this study, CapCut version 13.0.0 was used, and the researcher ensured sufficient storage space on the device to save the edited learning videos without issues. The learning material was then drafted in consultation with the subject teacher.

The researcher chose the material for creating Lastpiece (Plastic Waste Headpiece) because students had not previously been introduced to the process of making headpieces from plastic waste. On the other hand, plastic waste is a non-biodegradable material that cannot decompose naturally, posing significant environmental pollution risks (Zhang et al., 2015).

The recycling process for Lastpiece products aligns with the concepts of Reuse and Recycle. The accessories are made manually without involving industrial processes, although supporting materials like thread, wire, or cable ties can be used, provided they do not change the primary element of plastic waste.

Students can easily source the basic materials for making headpieces from plastic waste, as they are economical and readily available in daily life. This aligns with research by Babaremu et al. (2023), which states that most plastics produced today consist of Polyethylene (PE), Polypropylene (PP), Polystyrene (PS), and Polyvinyl Chloride (PVC), leading to a majority of studies focusing on these four polymer types.

The researcher designed the headpiece product, created a flowchart and storyboard to ensure the video tutorial was detailed and sequential, and began creating and editing the video using CapCut editing software. CapCut offered a diverse range of animation and transition options, enabling the researcher to select elements suitable for the video tutorial as learning media for 11th-grade vocational students.

Based on observations, interviews, and a series of needs analyses, this study aligns with Arief (2019), who stated that criteria for selecting learning media include conducting analysis and identifying characteristics, formulating instructional objectives, organizing teaching materials step by step, measuring what needs to be achieved, and detailing materials to ensure effective delivery.

After editing the video for evaluation, the researcher submitted validation sheets to media and material experts. The media was revised twice based on feedback provided by the experts.

The validated media, deemed “highly feasible” by the experts, was trialed with a small-scale sample consisting of 10th-grade Beauty and SPA students at SMKN 1 Salatiga. The trial results indicated the need for larger Google Drive storage capacity to avoid disruptions during the learning process. The researcher should have prepared a new email account as a backup during the study to provide additional storage for the learning videos. During the trial, the researcher had to re-upload the videos using another email

account. Learning videos uploaded to Google Drive required a stable internet connection to maintain resolution during downloads. During the trial, the researcher provided a hotspot for several students to download and save the videos offline for repeated viewing.

After the trial, the researcher evaluated the deficiencies and prepared the learning media for use during sample collection. The study was conducted with 11th-grade CA 1 Beauty and SPA students in the Creative Product and Entrepreneurship course over three meetings, from August 19 to September 10, 2024.

Both the control and experimental classes had different schedules for the Creative Product and Entrepreneurship course, with 11th-grade CA 2 on Mondays and 11th-grade CA 1 on Tuesdays. The control class, 11th-grade CA 2, was tasked with designing and creating Lastpiece accessories without using CapCut-based video tutorial media.

The researcher provided most of the tools and materials for the practical sessions, while students brought additional supplies such as scissors, rulers, cutters, beads, and nail polish. After the sessions, students submitted their Lastpiece accessory creations to the researcher and gave presentations for assessment. Pre-test and post-test scores from both the control and experimental classes were analyzed through normality tests, homogeneity tests, t-tests, and N-Gain calculations.

Media Feasibility

The feasibility of the video tutorial learning media was assessed by media experts, material experts, and student feedback. Before distributing the observation sheets for video learning assessment to media experts, material experts, and questionnaires to students, the researcher consulted three instrument experts at the Faculty of Engineering, UNNES. Suggestions were provided during discussions, focusing on revising questionnaire items and clarifying the evaluation procedure.

After obtaining validation for the observation sheet from the instrument experts, the researcher approached media experts specializing in video learning. The observation sheets for video learning assessment by media experts

included two aspects, four indicators, and nineteen statements. Two media experts participated in this research: Mariana Susanti, S.Sos., M.A., and Jakim Wiyoto, S.Si., members of the Digital Transformation and Learning Media Development team at the Balai Besar Guru Penggerak of the DIY Province, Kemendikbudristek.

During the first meeting, the media experts provided feedback for revision. After making the revisions, the researcher returned to the media experts and obtained assessment results. The overall scores from both media experts were calculated and categorized as “highly feasible.” Based on these results, the CapCut-based video tutorial was declared highly feasible for use as learning media in the Creative Product and Entrepreneurship course.

The media experts assessed aspects of the video tutorial, including audio-visual quality, practicality, and accessibility. This aligns with Donna Rhamdan (2024), who stated that CapCut-based video tutorials should be easily accessible to students both online and offline, as the learning videos must serve as tools to help students better understand the material. Marpaung et al. (2024) emphasized that effective learning media utilize visual and audio elements to enhance comprehension, making CapCut an appropriate choice for incorporating animations, illustrations, and suitable narration.

As highlighted in Suryani et al. (2015), video tutorials must adhere to media principles such as simplicity, coherence, clear guidance, efficient layout, appropriate use of images and text, segmentation, instructional quality, multimedia components, personalization, and the inclusion of narrator visuals and voice. The “highly feasible” validation from media experts indicates that the CapCut-based video tutorial meets these multimedia principles.

Following the media expert assessment, the researcher proceeded to validate the material with subject matter experts. The material evaluation sheet contained two aspects, four indicators, and seventeen statements. Two experts from Puspita Martha International Beauty School participated in this stage: R.A. Rukmiwati and Tutut Ageng Kardiyanti.

After two rounds of meetings and revisions based on feedback, the material experts scored the media, and the results fell into the “highly feasible” category. This confirmed that the CapCut-based video tutorial is suitable for use as learning media in the Creative Product and Entrepreneurship course.

The material experts evaluated the video tutorial’s content, aligning with Wardaya et al. (2024), which emphasized that effective learning media require alignment between video content, learning objectives, competencies to be achieved, and clarity of material presentation. This ensures the CapCut-based video tutorial functions as a feasible and effective educational tool.

Hendra (2015) outlined six principles for video tutorials, stating that they should convey messages clearly, originate from innovative ideas, incorporate sound elements to support the learning experience, utilize animations, and aid learners in absorbing information. The “highly feasible” validation from material experts indicates that the CapCut-based video tutorial complies with these multimedia principles.

After obtaining validation from both media and material experts, the researcher distributed the video tutorial via Google Drive links, which students in the experimental class of the Beauty and SPA program accessed for learning. Student response questionnaires were distributed after the students practiced making Lastpiece accessories. The questionnaire consisted of 26 statements covering aspects such as appearance, language, technical presentation, content, and usefulness. The overall results from the student responses were analyzed using descriptive percentage analysis based on the Likert scale.

The analysis showed that the CapCut-based video tutorial media was engaging for students, increased their motivation to learn, improved their skills, and provided a satisfactory and clear learning experience.

Differences in Student Learning Outcomes

In the experimental class, the CapCut-based video tutorial on Lastpiece creation was made available through a Google Drive link. The link was provided one week before the practical session on Lastpiece creation, or after the first meeting (pre-test), to give students ample time to

understand and study the material. During the first week of the study, the researcher began implementing the project-based learning model by instructing students to form groups of 5–6 members and assigning them the task of drawing their design plans.

Consistent with the study by Aris Yulianto et al. (2017), the steps in project-based learning include defining core questions, planning the project, creating a schedule, monitoring project progress, assessing outcomes, and reflecting on the experience.

In this study, the learning process began with a group prayer, followed by attendance taking. The teacher then posed basic questions to students about their knowledge of creative products made from plastic waste and the types of plastic waste they commonly encounter in their daily lives.

In the second week, the researcher conducted pre-tests with both the control and experimental classes. Both classes planned production and practiced creating Lastpiece accessories without the aid of the CapCut-based video tutorial. In the third week, the researcher conducted post-tests with both classes. Both classes completed production cost sheets and practiced creating Lastpiece accessories again, incorporating the feedback provided by the researcher during the pre-test assessment. However, in the experimental class, students used the CapCut-based video tutorial media during their practical work.

Students were very enthusiastic about creating headpieces from plastic waste with their respective groups, actively engaging in discussions and competing to produce the best headpiece. The implementation of the project-based learning strategy in this study aligns with the findings of Issa and Khataibeh (2020), which suggest that Project-Based Learning can encourage students to develop dynamic and diverse cognitive, affective, and psychomotor patterns, such as increasing motivation, curiosity, attitude development, and independence.

The application of CapCut-based video tutorial media in this study is consistent with the findings of Mardiah and Astuti, which highlighted that the primary function of video tutorials is to serve as a guide that enables

students to understand material through an audio-visual approach, allowing them to actively engage in practical learning activities.

The active behavior demonstrated by students while creating headpieces with their groups also aligns with the study by Kizkapan and Bektas (2017), which indicated that project-based learning is an appropriate approach as it requires students to actively construct and interpret new knowledge, address existing misunderstandings among students, and engage in a more meaningful learning process.

Most of the tools and materials used by the students during the practical sessions were provided by the researcher. However, some additional supplies, such as scissors, rulers, cutters, beads, and nail polish, had to be brought by the students themselves. After the practical sessions, both classes presented their work, received assessments from the researcher using performance test instruments, and documented their products.

The researcher obtained scores from the pre-test and post-test in the control class, as well as from the pre-test and post-test in the experimental class. These scores were then analyzed using normality tests, homogeneity tests, t-tests, and N-Gain analysis.

Effectiveness of Learning Media

After observing significant differences in the learning outcomes of the control and experimental classes, the researcher calculated the effectiveness of the CapCut-based video tutorial media using N-Gain scores derived from pre-test and post-test data. The findings confirmed that the CapCut-based video tutorial on Lastpiece creation was effective in improving students learning outcomes. This aligns with Rizka Ananda (2019), who demonstrated that video tutorials are effective learning media for enhancing student outcomes in classroom learning.

The post-test results of the experimental and control classes, supported by t-test and N-Gain analysis, proved that the learning outcomes of the experimental class using CapCut-based video tutorial media were higher than those of the control class, which did not use the media.

CapCut-based video tutorial media has been shown to effectively enhance understanding and maintain students attention during learning sessions. This aligns with Asmaryadi et al. (2024), who stated that CapCut helps students grasp material more meaningfully, sustain attention for longer periods, and make learning more interactive. Haleem et al. (2022) also noted that CapCut is a useful tool for education and content creation, simplifying complex concepts and making them more engaging for students. Furthermore, Pahmi et al. (2022) emphasized that CapCut is highly beneficial for teachers, as videos edited with this application become more engaging and comprehensive, preventing students from becoming bored while learning.

The CapCut-based video tutorial media for Creative Product and Entrepreneurship lessons fulfills the functions of learning media, delivering positive impacts and fostering student enthusiasm. According to Azhar Arsyad (2019), learning media is designed to capture students attention, make the learning process enjoyable, facilitate understanding through audio-visual elements, and reinforce memory retention.

Supported by performance test results during the pre-test and post-test sessions, the experimental class initially struggled with forming headpiece elements, assembling them correctly, and completing the finishing process. By the post-test, the experimental class was able to create and assemble headpiece elements correctly, with improved finishing, resulting in neat, market-ready products.

Examples of headpieces created by the experimental class include "Bloom Halo," made from shopping bag plastic, combined with floral wire and beads; "Thistle Majesty," featuring leaves and flowers made from plastic bags and enhanced with pearl beads; and "Floral Peacock," using cable ties, shopping bag flowers, and cardboard. Each design reflected creativity, precision, and adherence to product specifications, demonstrating the effectiveness of the CapCut-based video tutorial in fostering student learning and skill development.

The results align with Mahajan and Singh (2017), who described learning outcomes as the abilities acquired by students after engaging in a learning experience. This study also corresponds

with Van der Meij (2016), who emphasized that video tutorials provide training that learners can follow directly.

Consistent with Hamilton et al. (2021), the psychomotor aspects of learning outcomes observed in this study demonstrated enhanced skills and creativity among Beauty and SPA program students after practicing Lastpiece accessory creation with the CapCut-based video tutorial. This was further supported by the variety, imagination, innovation, quality, and neatness observed in the experimental class's accessory designs, which adhered to the specified product criteria.

CONCLUSION

Based on the results of development research and discussion on the development of CapCut-based video tutorial media as learning media to achieve learning outcomes in the Creative Product and Entrepreneurship course for students at SMKN 1 Salatiga, the following conclusions were obtained:

1. The development of CapCut-based video tutorial media with the material on Lastpiece creation in the Creative Product and Entrepreneurship course was carried out using the R&D model by Borg and Gall. The results of the development show that the developed learning media has several advantages, including videos that attract students attention, increase motivation and interest in learning, are more interactive, have high quality, and provide more complete and sequential content.
2. The CapCut-based video tutorial was declared highly feasible for use as learning media in the Creative Product and Entrepreneurship course. This conclusion is based on the assessments of material and media experts, who categorized the CapCut-based learning media as highly feasible. The study was implemented in 11th-grade of the Beauty and SPA program at SMKN 1 Salatiga, with a total sample size of 69 students. Based on students questionnaire responses, 61% stated that the CapCut-based video tutorial media was highly feasible, while 39% agreed that it was feasible.

3. There was a significant difference in the learning outcomes of students in the control class and the experimental class, as evidenced by the results of the independent sample t-test, which showed a significance value of $0.000 < 0.05$. This indicates that the implementation of CapCut-based video tutorial media in the experimental class resulted in different learning outcomes compared to the control class, which did not use the video tutorial media.
4. CapCut-based video tutorial media was proven to be effective in improving students learning outcomes. This was demonstrated by the results of the N-Gain pre-test and post-test in the experimental and control classes, which showed that the control class had an average N-Gain score of 24%, indicating that the absence of CapCut-based video tutorial media was less effective in improving students learning outcomes. Meanwhile, the experimental class had an average N-Gain score of 87.4%, indicating that the use of CapCut-based video tutorial media was effective in improving students learning outcomes in the Creative Product and Entrepreneurship course.

SUGGESTIONS

Based on the results of this study, it is suggested that CapCut-based video tutorial media be used as learning media in the Creative Product and Entrepreneurship course to help students understand the material on Lastpiece creation and enhance their motivation and creativity. Further research can include additional material on marketing strategies and selling Lastpiece products to provide students with more entrepreneurial experience.

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