

Development of Interactive Learning Media for Old Character Makeup in the Hair Styling and Fantasy Makeup Course

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ABSTRACT

This study aims to develop interactive learning media for old character makeup in the Hairdressing and Fantasy Makeup course, in order to overcome the limitations of existing media and increase student engagement. The research and development (R&D) method with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model was used in this study. The media was developed using the Canva application, and data was collected through a Likert-scale questionnaire from material experts, media experts, and students. The results showed that this interactive learning media was very feasible and practical. The validity test by the material experts obtained a percentage of 94.67%, and by the media experts 97.33%, both in the "Very Valid" category. Meanwhile, the practicality test by students through one-to-one trials reached 96% and small group trials reached 94.18%, both categorized as "Very Practical". Despite some limitations in the platform and interactive features, this product has proven effective in facilitating understanding and increasing student learning motivation. Thus, this interactive learning media for old character makeup is recommended as an alternative to support the learning process.

Keywords: *Interactive Learning Media, Old Character Makeup, ADDIE Model.*

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INTRODUCTION

Education plays an essential role in supporting the development of individuals towards a better quality of life, including increasing insights, skills, and the formation of positive behaviors. In globalization and the rapid development of information technology, the use of technology at various levels of education is no longer just an option, but a fundamental need to support the effectiveness and efficiency of learning (Darmawan, 2012; Daryanto, 2016). Electronic devices such as *smartphone*, laptops, and personal computers are now the main means for students to access materials independently through various *platform* digital, such as *E-Module*, *E-book*, and learning videos. This transformation requires educators to innovate in choosing and developing learning media that is not only informative, but also interesting and able to increase active student engagement.

In the scope of vocational education, especially the Cosmetology Education Study Program, learning materials often require complex visualization and demonstration. One of the challenging materials is the makeup of old characters, which demands a deep understanding of facial anatomy, optical illusion techniques, as well as the use of various tools and cosmetics to create realistic characters. Initial observations show that students often face difficulties in understanding the concept of old character makeup theoretically due to the limitations of interactive and innovative learning media. Conventional media, such as textbooks or one-way demonstrations, are often not enough to visualize all the stages and details required in a character's makeup (Mulyanta & Leong, 2009). The gap between the need for dynamic learning media and the availability of relevant media is the starting point of this

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research. Preliminary data through a questionnaire showed that 91% of students of the S1 Cosmetology Education Study Program at the State University of Jakarta strongly agreed with the existence of interactive learning media as a support for Hair Styling and Fantasy Makeup courses, underlining the urgency of developing innovative media.

Departing from these problems, this research focuses on the development of interactive learning media for old character makeup. The concept of product development in this context refers to *Research and Development* (R&D), a systematic research method to produce a specific product and test its effectiveness (Scott, 2019). According to Borg and Gall (1983), development research is the process of developing and validating new or existing products, while Seels and Richey (1994) emphasizing that development products must meet the criteria of validity, practicality, and effectiveness. In the context of learning media, this effectiveness depends heavily on the ability of the media to convey information clearly, increase motivation, and overcome the limitations of senses, space, and time (Daryanto, 2016).

The ADDIE (Analysis, Design, Development, Implementation, Evaluation) development model was chosen as the framework in this study because of its systematic, flexible, and cyclical nature, allowing evaluation and improvement at each stage (Branch, 2009). The analysis stage is carried out to identify the needs and characteristics of students. Planning (*Design*) involves the formulation of a conceptual framework and *storyboard*. Development (*development*) is the realization of the product based on the design, followed by a validity test by experts. Implementation (*implementation*) is the stage of product testing to users, and evaluation (*evaluation*) is carried out on an ongoing basis to ensure the product meets the standards of feasibility. Each stage in the ADDIE model influences each other and allows for continuous adjustment, from pre-production to post-production (Scott, 2019).

In the development of interactive learning media, the selection of software is crucial. Canva, as a development tool, was chosen for its ease of use, the number of *template* and available design elements, as well as their online and free accessibility. Although Canva has limited features in its free version and customization that is not as extensive as professional software, this convenience greatly supports researchers in realizing interactive designs efficiently. Criteria for a good learning medium, according to Mulyanta and Leong (2009), is an easy, engaging, and useful medium. The concept of interactive learning multimedia itself refers to the incorporation of various media formats (text, images, audio, video, animation) equipped with user-operated control tools, allowing active interaction and participation in the learning process (Daryanto, 2016, p. 53).

This research aims to develop and produce valid and practical old character makeup interactive learning media. Validity is measured through assessments by subject matter experts and media experts, while practicality is measured through trials to students. It is hoped that the resulting products are not only innovative but also meet feasibility standards and can be implemented effectively in the learning process. The significance of this research lies in its contribution in providing alternative learning media that is able to improve students' understanding and skills in old character makeup materials, as well as being a reference for the development of similar learning media in the future.

METHOD

This research was carried out on students who took the Fantasy Cosmetology course, S1 Cosmetology Education Study Program, Faculty of Engineering, State University of Jakarta, which is located on Jl. Rawamangun Muka, RT.11/RW.14, Rawamangun, Pulo Gadung, East Jakarta City. The development process of this product lasted from February to July 2025.

The type of research used is the research and development method (*Research and Development* - R&D). The R&D method is a systematic approach to produce a specific product and test the effectiveness of that product (Sugiyono, 2019, p. 257). The purpose of product development in this study is to create interactive learning media that can support the Fantasy Cosmetology lecture process, with the hope of making it easier for educators to deliver material and help students understand the material more effectively.

The development model adopted in this study is the ADDIE model (*Analysis, Design, Development, Implementation, Evaluation*). The ADDIE model was chosen for its advantages in providing systematic work procedures, where each stage is interrelated and its implementation is based on the results of the evaluation from the previous stage (Tegeh & Pudjawan, 2014). This model is *student-centered*, innovative, authentic, and inspirational (Branch, 2009), which is very relevant for the development of interactive learning media.

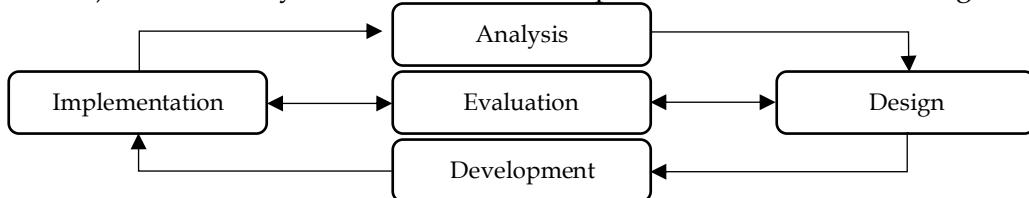


Figure 1. ADDIE Development Model

Source: (Sa'adah & Wahyu, 2020)

The target of this interactive learning media product is students of the Cosmetology Education Study Program, Faculty of Engineering, State University of Jakarta, both who have taken or are taking the Fantasy Cosmetology course.

The research instrument used was a questionnaire. This questionnaire is designed to collect data on product validity from material experts and media experts, as well as product practicality from students. The scale used in all instruments is the Likert scale, which serves to measure respondents' attitudes, opinions, and perceptions (Riduwan, 2008, p. 12). The answers of each instrument are interpreted into a score of 1 to 5, where 5 indicates "Strongly Agree" and 1 indicates "Strongly Disagree". The material expert validation instrument measures aspects of learning design, material content, and language and communication. The media expert validation instrument assesses the linguistic aspects, presentation, and feasibility of the overall appearance of the media. Meanwhile, the student practicality instrument focuses on the content or material aspects and media aspects from the user's point of view. All of these instruments have been compiled based on relevant indicators and validated by the supervisor.

The Canva app is used as a tool for developing this interactive learning media. Canva is an online graphic design application that offers a wide range of *template* and design options, making it easier and time-saving to design learning media (Leryan, 2018). Canva's advantages include a simple and easy-to-understand interface, the availability of a variety of *template* and ready-to-use design elements, free accessibility via web and apps, online collaboration capabilities, and export features in a variety of formats. These advantages make Canva effective and practical in supporting the development of interactive learning media (Tanjung & Faiza, 2019).

The product development procedure follows the stages of the ADDIE model in detail:

Analysis Stage: This initial stage involves the analysis of needs and identification of problems, such as the unavailability of interactive learning media specifically for old character makeup materials. The results of the questionnaire showed that 91% of students agreed with the development of interactive media.

Design Stage: At this stage, the researcher designs learning media according to the results of the analysis. This includes determining the subject matter, drafting a media framework, and creating a storyboard as a guide for product visualization (Waryanto, 2005). The preparation of validation and practicality instruments is also carried out at this stage.

Development Stage: This stage is the realization of product design, where learning media is developed using Canva according to the storyboard and predetermined materials. After the product is completed, validation is carried out by lecturers who are experts in materials and media experts using instruments that have been prepared. Input from validators is used for revision and improvement of media before testing to students.

Implementation Stage: After validation, a practicality test is carried out involving students of the S1 Cosmetology Education Study Program. The

Development of Interactive Learning Media for Old Character Makeup in the Hair Styling and Fantasy Makeup Course media is presented to students who are then asked to fill out an assessment questionnaire to obtain information about the feasibility and practicality of using media.

Evaluation Stage: This final stage analyzes the shortcomings or weaknesses of the media after implementation. The researcher conducted a final revision of the developed learning media product, based on the results of the assessment and input obtained from the questionnaire questionnaire that had been filled out by experts and students. The purpose of this stage is so that the learning media products developed can meet the standards set and are ready to be used by S1 Cosmetology Education students.

The main data collection technique is questionnaires, both open and closed questionnaires (Riduwan, 2008, p. 26). In this study, a closed questionnaire with a Likert scale was used to collect data from material experts, media experts, and students. This questionnaire is validated first by the supervisor. The data analysis technique uses descriptive analysis in the form of scoring calculation from the results of filling out the questionnaire. The data was processed using a percentage formula for validity test and practicality test. The validity level is calculated by the formula:

$$P = \frac{\text{Jumlah skor yang diperoleh}}{\text{Jumlah skor total}} \times 100\%$$

Source: (Riduwan, 2008, pp. 14-15)

The percentage results are then interpreted into specific categories (e.g., "Very Valid" or "Very Practical") using the relevant conversion table. This analysis aims to measure respondents' attitudes, opinions, and viewpoints towards the developed learning media (Sugiyono, 2019, p. 167).

FINDINGS AND DISCUSSION

The results of the research on the development of interactive learning media for old character makeup in the Hair Styling and Fantasy Makeup course.

The Process of Developing Interactive Learning Media for Old Character Makeup Using the ADDIE Model

The development of interactive learning media products for old character makeup is carried out through a series of stages that refer to the ADDIE model (*Analysis, Design, Development, Implementation, Evaluation*). This model was chosen because of its systematic and cyclical nature, allowing evaluation and improvement at every stage, resulting in a quality product (Branch, 2009; Sugiyono, 2019). The design of this product development pipeline, which is specifically embodied in the pre-production, production, and post-production pipelines, has been the main guide in this study.

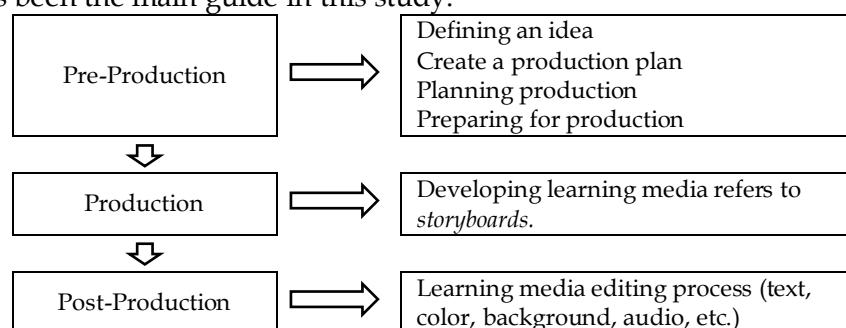


Figure 2. Product Design Using ADDIE's Development Model

Analysis Stage

The analysis stage is a crucial foundation in this development, where the researcher identifies the urgent needs and constraints that exist in the learning process. The main finding at this stage is that there is no special interactive learning media for old character makeup materials in the Hair Styling and Fantasy Makeup course. Questionnaire data shows that 91% of students of the Cosmetology Education S1 Study Program at the State University of Jakarta agree with the existence of interactive learning media in the course. This confirms the strong

need for innovation in the delivery of materials, in line with Daryanto's opinion (2016, p. 54) which states that the right learning multimedia will provide great benefits to educators and students.

Design Stage

Once the needs are identified, the design stage focuses on the preparation of the conceptual framework of the learning media. This process includes the collection of sources of subject matter based on the SUB-CPMK of the Hair Styling and Fantasy Makeup course, such as the concept of character makeup, the difference between 2-dimensional and 3-dimensional character makeup, and its application techniques. Visual design is realized through the creation of *storyboard* that details the description of each *Slide*, from the opening to the main menu, as a production guide (Waryanto, 2005). The preparation of validity instruments for subject matter experts and media experts, as well as practicality instruments for students, is also carried out at this stage to ensure a comprehensive evaluation in the future. This stage is very important to ensure that the product design is in accordance with the learning objectives to be achieved.

Development Stage

The development stage is the implementation phase of the design that has been made, where learning media is concretely realized using the Canva application. Canva was chosen because of its simple and easy-to-understand appearance, variety *template* and design elements, as well as their ability to be freely accessed and support collaboration *Online* (Leryan, 2018; Tanjung & Faiza, 2019). This process involves filling in the material, making visual adjustments (color, size, *Font*, *background*), as well as the creation of interactive buttons. After the media is completed, the validity test is carried out by material experts and media experts. The material expert, Mrs. Nurina Ayuningtyas, M.Pd., gave an assessment of "Very Valid" with a percentage of 92% in phase I and 94.67% in phase II, after revision which included improvements to the CPMK page, consistency of size and *Font* letters, adjustment of material titles, and addition of materials related to 2-dimensional and 3-dimensional character makeup along with tools, materials, and cosmetics. Media expert, Mr. Muhammad Riansyah Lubis, S.Kom, also gave an assessment of "Very Valid" with a percentage of 97.33%, after a revision to shorten sentences on the media usage instructions menu to make it more *user-friendly*. The results of this validation show that this learning media product has met the criteria of high validity, in line with the statements of Seels and Richey (1994) that development research aims to meet the criteria of validity, practicality, and effectiveness.

Implementation Stage

The implementation stage focuses on testing the practicality of learning media by involving students of the S1 Cosmetology Education Study Program class of 2022 who have taken the Hair Styling and Fantasy Makeup course. The trial was conducted in two stages: *one to one* and *small group*. Trial *one to one* With 3 students producing a practicality percentage of 96%, without significant criticism or suggestions from respondents, showing that the media is already very practical to use. Next, the trial *small group* With 15 students, it produced a practicality percentage of 94.18%. The results of this practicality test confirm that the interactive learning media of old character makeup developed is "Very Practical" and is suitable for use in learning activities. This is in line with the goal of developing interactive learning media to make it easier for students to learn independently and understand the material (Rianto, 2020).

Evaluation Stage

The evaluation stage is the final stage in the ADDIE model, where the final revision is carried out based on input from experts and students. This continuous evaluation process ensures that each stage of development influences each other, resulting in a quality product. The ADDIE model excels in providing a short but comprehensive procedure from pre-production, production, to post-production proven to be effective in producing products that meet feasibility standards.

Validity and Practicality of Interactive Learning Media for Old Character Makeup

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The level of feasibility and practicality of the media is an important indicator in development research, ensuring that the media produced meets quality standards and is easy to use by the target user.

Validity Test Results by Experts

This interactive learning media was tested for feasibility by material experts (Mrs. Nurina Ayuningtyas, M.Pd.) and media experts (Mr. Muhammad Riansyah Lubis, S.Kom). The results of the validity test show that this media is in the "Very Valid" category. From material experts, the media obtained a percentage of 94.67% (after revision), while from media experts, the media obtained a percentage of 97.33%. These two percentages indicate that the product has accurate content quality, good language, attractive design, and optimal ease of use. Revisions made based on expert input have improved the media from the content aspect, consistency of presentation, to the efficiency of the instructions for use.

Results of Practicality Test by Students

The level of media practicality was measured through a trial for students of the Cosmetology Education Study Program, State University of Jakarta class of 2022. The trial was carried out in two stages: one to one (3 students) and small group (15 students). The results of the one-to-one trial showed a percentage of practicality of 96%, which is included in the "Very Practical" category. In the small group trial stage, the percentage of practicality obtained was 94.18%, also in the "Very Practical" category. This high level of practicality shows that the media is easy to operate, effective in facilitating the understanding of the material, and well received by students as users. This proves that this media is able to support independent learning and increase student learning motivation.

Supporting and Inhibiting Factors as well as Strengths and Weaknesses of Interactive Learning Media Old Character Makeup

The process of developing and implementing interactive learning media is inseparable from the existence of supporting and inhibiting factors that affect the smooth and successful of the project, as well as producing products with certain strengths and weaknesses.

Supporting Factors in Development and Implementation

Some significant supporting factors include: (1) Clear and Urgent Need of Students for Interactive Media, which is the main driver. (2) Expert Support and Validation who provide constructive input and confirm product quality. (3) Availability and Ease of Use of the Canva App as a *user-friendly* and efficient development tool. (4) Systematic ADDIE Model Structure that guides the entire development procedure. (5) Active Participation of Respondents (students) in trials that provide valuable feedback for improvement.

Inhibiting Factors in Development and Implementation

However, there are also some obstacles: (1) Canva's Free Version Feature Limitations, which limit the choice of advanced design and customization. (2) Limited Customization when compared with professional design software. (3) Reliance on Internet Connection because Canva is an online-based application, which can be a constraint in areas with limited internet access. (4) Repetitive Revision Processes which, although essential, require extra time and precision.

Strength of Produced Products

The product has several main strengths: (1) High Validity of material and media experts, guaranteeing accuracy and quality. (2) Excellent Practicality, making it easy for students to use. (3) Interactive and Rich Multimedia, which increases attractiveness and understanding. (4) Increase Motivation and Learning Engagement due to attractive presentations. (5) Filling the Gap of Innovative Learning Media in old character makeup materials. (6) Accessibility and Flexibility due to its digital nature.

Disadvantages of Manufactured Products

Some of the product's weaknesses include: (1) Reliance on the Canva Platform, which brings with it feature limitations and customization. (2) Requires an Internet Connection for access and editing. (3) Not Have Complex Interactive Features Such as Live Simulations or Adaptive Quizzes. (4) Focus on Visual-Audio Content that may not yet fully accommodate all

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 learning styles. (5) Potential Limitations in Detailed Representation for very subtle artistic nuances compared to direct practice.

CONCLUSION

This development research succeeded in producing an interactive learning media for old character makeup that has been proven to be Very Valid and Very Practical. The validity of the product was confirmed by a material expert with a percentage of 94.67% and a media expert with 97.33%, indicating high quality of content, design and functionality. Meanwhile, the practicality of the product was considered "Very Practical" by students through *one to one* (96%) and *small group* (94.18%) trials, emphasizing its ease of use and effectiveness in facilitating learning. Although there are some limitations related to the development platform and more complex interactive features, this medium is overall very feasible and effective to be used as an alternative in the learning process of Hairstyling and Fantasy Makeup courses, and has the potential to increase student motivation and understanding.

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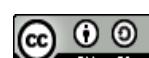
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