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Development of Animated Video-Based Learning Media on Stage Make Up Material at SMKN 3 Probolinggo

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Abstract

Learning media is vital in supporting students' practical and exciting learning process, especially in learning that requires understanding specific concepts and competencies. The development of this animated video-based learning media is based on the need for innovative learning media development and following technological developments, especially in the context of stage makeup learning. This research also aims to determine 1) the development of animated video-based learning media, 2) the feasibility of animated video-based learning media, and 3) students' responses to using animated video-based learning media. This research uses a quantitative approach using the R&D *(Research & Development*) method and *Four-D* (4-D) research design. The 4-D stages adopted in this study include *Define*, *Design*, and *Development*. The data obtained validate the feasibility of animated video-based learning media and student responses. The research subjects were 26 Skin and Hair Beauty students at SMKN 3 Probolinggo. The data collection method used was a validation test and questionnaire. The analysis method uses averages to determine the feasibility of learning media and learner responses. Based on the results of data analysis of the feasibility of animated video-based learning media, very valid criteria were obtained, namely with an average of 89.78% for media experts and 88.89% for material experts. Students' response to the development of animated video-based animation media is excellent, with an average of 89.68%.

Keywords: Development, *Four-D* (4-D) Models, Learning Media, Animated Video, Stage Make Up

Abstrak

Media pembelajaran memegang peran penting dalam mendukung proses pembelajaran yang efektif dan menarik bagi peserta didik. Khususnya pada pembelajaran yang memerlukan pemahaman konsep dan kompetensi yang bersifat spesifik. Pengembangan media pembelajaran berbasis video animasi ini didasarkan pada kebutuhan akan pengembangan media pembelajaran yang inovatif dan sesuai dengan perkembangan teknologi, khususnya

dalam konteks pembelajaran tata rias wajah panggung. Penelitian ini juga bertujuan untuk mengetahui: 1) pengembangan media pembelajaran berbasis video animasi 2) kelayakan media pembelajaran berbasis video animasi, 3) respon peserta didik terhadap penggunaan media pembelajaran berbasis video animasi. Penelitian ini menggunakan pendekatan kuantitatif dengan menggunakan metode penelitian R&D (Research & Development) dengan menggunakan desain penelitian Four-D (4-D). Tahapan 4-D yang diadaptasi dalam penelitian ini meliputi 3 tahap di antaranya yaitu Pendefinisian (Define), Perancangan (Design), dan Pengembangan (Development). Data yang didapatkan berupa hasil validasi kelayakan media pembelajaran berbasis video animasi, dan respon peserta didik. Subyek penelitian adalah 26 peserta didik Tata Kecantikan Kulit dan Rambut di S M K N 3 Probolinggo. Metode pengumpulan data yang digunakanadalah uji validasi, dan angket. Metode analisis menggunakan rata–rata untuk kelayakan media pembelajaran, dan respon peserta didik. Berdasarkan hasil analisis data kelayakan media pembelajaran berbasis video animasi, diperoleh kriteria sangat valid yaitu dengan rata–rata 89.78% untuk ahli media dan 88.89% untuk ahli materi. Respon peserta didik terhadap pengembangan media animasi berbasis video animasi adalah sangat baik dengan memperoleh rata–rata sebesar 89.68%.

Kata Kunci: *Pengembangan, Four-D (4-D) Model, Media Pembelajaran, Video Animasi, Tata Rias Wajah Panggung*

Introduction

Education aims to realize intelligent, skilled, and independent human resources (HR). Therefore, efforts to improve the quality of education continue to be made through improving school facilities and infrastructure. The improvement efforts align with the developments and changes that occur in society.(Adawiyah & Mahmuddin, 2023)

In this digital industry era, there is a paradigm shift in society to become internet users (digital citizens) based *online*. This paradigm shift occurs due to changes that develop towards modernity by utilizing technological developments as a medium used in various aspects. According to (Darmawan, 2017: 1), changes occur due to shifts, additions, reductions, substitutions, and developments, which can form a new social system; this also appears in the education system. This rapid development of technology also affects learning activities in schools, especially in the application of learning media.(Palwati et al., 2023)

Learning media is one of the elements that cannot be separated from the teaching and learning process to achieve educational goals. Learning media is a tool to accelerate the process of transferring learning material and a partner for educators to accelerate the process of delivering material. Learning media can also be used in a creative, communicative, and innovative learning process that supports improving learning activities.(Darmawati, 2023)

According to KBBI, media is a tool (means) of communication such as newspapers, magazines, radio, television, films, posters, and banners, which is located between two parties (people, groups, and so on), intermediary; connector. Learning media carries messages or information with instructional purposes or teaching purposes (Arsyad, 2014). Meanwhile,

according to Daryanto (Wibowo, 2019), teaching media is anything that can be used to channel messages from sender to receiver so that it can stimulate the thoughts, feelings, attention, and interests and attention of students in such a way that the learning process occurs. The learning process occurs when there is interaction between teachers and students. So that with appropriate and appropriate use, learning can be appropriately directed.(Wirahyuni et al., 2023)

The government, through the Ministry of Education, Culture and Research and Technology (Kemendikbudristek), has responded to the challenges of the need for quality and competitive workforce resources in the industrial world both at the national and international levels by implementing an independent learning curriculum as the latest reference in the implementation of learning activities. Minister of Education, Nadiem Makariem emphasized in the Decree (Decree) of the Head of the Education Standards, Curriculum and Assessment Agency of the Ministry of Education and Culture Research and Technology (BSKAP) No. 044 / H / KR / 2022 that more than 140 thousand units of educational institutions in the 2022/2023 school year in Indonesia implemented the implementation of the Merdeka Curriculum.

The Merdeka Curriculum is expected to improve the quality of learning in Indonesia. The essence of the independent curriculum is student-centered education, where education pays attention to students' learning needs, interests, and talents to catch up during the Covid-19 pandemic. The Merdeka Curriculum includes a curriculum with diverse intracurricular learning according to the environmental conditions of each school. In this curriculum, schools have the opportunity and role to develop teaching tools independently. This, of course, increases the efficiency and effectiveness of the learning process because it is designed based on the needs and conditions in the relevant schools. Thus, the resulting learning media becomes more effective for students.(Bumbungan et al., 2024)

Suitable learning media can help increase students' interest in learning. One of the technology-based media that can be utilized is animation. An animated video is a moving picture consisting of many objects that are specially arranged to move for a specific duration according to the scene. Objects in human writing, animal images, plants, buildings, etc. (Putri, R., Mukti, Abd., & Ananda, R., 2023). Meanwhile, according to Ibiz Fernandes in his book *Macromedia Flash Animation & Cartooning Acreative Guide*, animation is defined as recording and playing a series of static images to get the illusion of movement (Zainiah, 2016).

The selection of animation is considered to follow practical competencies because it provides an overview of the material to students through animated shows that can be accessed anytime and anywhere (Kartikasari & Suryarini, 2023). Unique animations and illustrations can also help students to understand learning concepts. So, it can be concluded that animation can support material that applies to practice. One of them is on-stage makeup material. Stage makeup material is one of the materials studied in the Skin and Hair Beauty Expertise Program at SMKN 3 Probolinggo. This makeup element weighs 2 x 18 JP and is in phase F. Stage makeup material requires an understanding of the concept to be able to apply it in applying makeup. The stage makeup skill equips students with the skill, knowledge, and attitude to be competent in performing makeup for stage makeup needs in the field. (Loebis, 2024)

This stage makeup material contains the basic concepts of stage makeup, makeup design concepts according to the theme, and stage makeup work procedures according to POS (Standard Operating Procedures). At the end of phase F, learners can explain the basic concepts of cosmetology, geriatrics, stage, photography, character and fantasy makeup (body panting), work preparation, consultation and analysis of facial skeleton characteristics, and makeup design concepts according to the theme. Based on the explanation described above, there is a need for the use of technology in the field of education, especially in the development of learning media, namely animated videos, as a means of learning media for stage makeup material at SMKN 3 Probolinggo. So, the researcher examines the discussion titled "Development of Animated Video-Based Learning Media on Stage Makeup Material at SMKN 3 Probolinggo".

Research Method

This type of research uses the research and development (R&D) method. Research and development (R&D) is used to design, research, produce, and test the feasibility of products in the form of created objects or programs (Sugiyono, 2019). The development model used adapts the design model developed by Thiagarajan, known as the 4-D (Four-D) model. According to Thiagarajan, the 4-D development model consists of 4 stages: definition, design, development, and dissemination.

The research was conducted at SMKN 3 Probolinggo in the odd semester of the academic year 2023/2024. The study population was class XI students of Skin and Hair Beauty Management at SMKN 3 Probolinggo, with a sample of one class of 26 students. The data collection technique consists of (1) a validation test. Validators carried out the validation test to ensure that the media and instruments used were feasible, and (2) questionnaires (questionnaires) were used to measure student responses to the learning media provided. The data obtained from each instrument was processed using the appropriate formula for assessing the feasibility of the press using a Likert scale (Sugiyono, 2016) with the following provisions:

Table 1. Scoring Provisions

Category	Score
Not very good	1
Not good	2
Good enough	3
Good	4
Very good	5

The next calculation is to find the average of each media expert and material expert with the formula:

$$\bar{x} = \frac{\Sigma xi}{n}$$

(Sudjana, 2005)

Note:

$\bar{x}$: Average value of validator answers

Σxi : Total validator assessment score

n : Number of media validators

The next stage is to determine whether or not the media is suitable for use by categorizing it according to the scale based on the following table:

Table 2: Percentage Scale of Validator Assessment

Interval	Description
81% - 100%	Very Valid
61% - 80%	Valid
41% - 60%	Fairly Valid
21% - 40%	Less Valid
0% - 20%	Invalid

The next stage is to calculate the collected respondent data and then process it using the following formula (Sugiyono, 2015).

$$\text{Value} = \frac{\textit{Student score}}{\textit{Maximum score}} \times 100$$

Table 3. Student Response Assessment Criteria

Interval	Description
81% - 100%	Very good
61% - 80%	Good
41% - 60%	Good enough
21% - 40%	Not so good
0% - 20%	Not good

Result/Findings

Observation Results

1. Development Procedure of Animated Video-Based Learning Media

   This research uses the 4-D development model with the following description:

   a. Product Description

      Making products in animated videos supports learning activities using innovative, exciting, and technology-based learning media. The animated video includes material, understanding, classification, tools, materials and cosmetics, work steps, and stage makeup procedures with a duration of 3 minutes 35 seconds and a video capacity of 130 MB.

   b. Results of Animation Video Media Development

Table 4. Media Development Results

Scene 1-4	
	
	
Scene 5-8	
	
	

   c. Product Revision

      Media testing was conducted on four validators: media expert lecturers, material expert lecturers, and vocational teachers. The results obtained the following suggestions:

Table 5. Media Expert Validation

No.	Feedback	Revision Result
1.	Adjustment of image illustrations to the material displayed.	Change the image illustration to be more relevant.
2.	Correct words that still have spelling or writing errors.	Correct the writing according to EYD.

Table 6: Media Revision Results

Before Revision	After Revision
	

2. Media Feasibility Test

Validators were given a validation sheet whose statements included media and material categories using a scale of 1-5.

a. Material Aspects

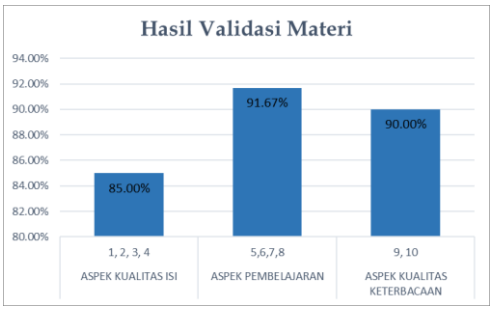

Figure 1. Material Expert Validation Results

Based on the assessment results above, the content quality aspect is 85%, the learning quality aspect is 91.67%, and the readability quality aspect is 90%. Overall, the validation of material aspects on animated video-based learning media obtained an average of 88.89%, so it was categorized as "Very Valid."

b. Media Aspects

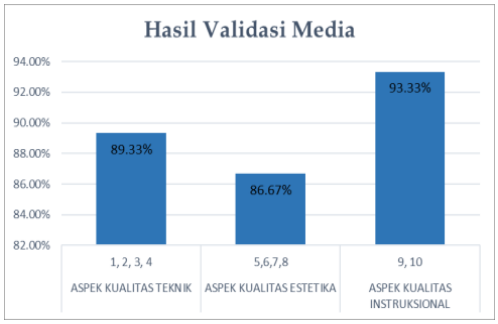

Figure 2. Media Expert Validation Results

Based on the assessment results above, the technical quality aspect is 89.33%, the aesthetic quality aspect is 86.67%, and the instructional quality aspect is 93.33%. Overall, the validation of media aspects on animated video-based learning videos obtained an average of 89.78%, categorized as "Very Valid."

3. Student Response Results

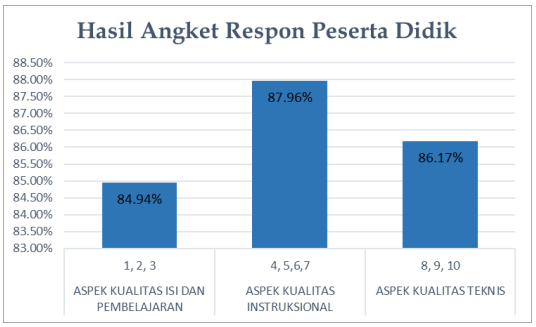

Figure 3. Student Response Results

Based on the assessment results above, the content and learning quality aspects were 84.94%, the quality aspect was 87.96%, and the technical quality aspect was 86.17%. Overall, the animated video-based learning media received a perfect response, as evidenced by the results of the questionnaire score of 89.68%, which was categorized as "Very Good."

Conclusion

The results of this learning media development with the 4-D *(Four D)* development model are suitable for improving animated video-based learning media that can be used to support learning activities, especially on-stage makeup material. The results of the material expert validation test on animation-based learning media obtained an average value of 88.89%, and the results of the media expert validation test on animation-based learning media obtained an average value of 89.78%, so it is categorized as "very feasible" to be used in learning activities. The results of the students' response questionnaire to the development of animated video-based learning media in stage makeup material at SMKN 3 Probolinggo received a good response from students, with an overall average of 89.68%.

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