

Interactive Media for Make-Up Black and White Photo Color (IMFM) as Medium Study: Activity and Effectiveness Outcomes

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ABSTRACT

Education will produce scholarly, intellectual and technological human resources to increase competitiveness. Black and white photo and color makeup is one of the core competencies of a beautician. There are still limitations in learning black and white photo and color makeup in the Department of Makeup and Beauty, Faculty of Tourism and Hospitality, Padang State University. Students are still struggling to master the basics of black and white and color photo makeup and have not been able to apply materials and cosmetics correctly. This study aims to develop interactive multimedia learning media for black and white photo and color makeup. This research is a development using the 4-D method (define, design, develop and disseminate). Quality and practicality were observed in teachers, students and practicing professionals. The results show the following; (1) The validity of interactive multimedia as a valid medium (2) The practicality of interactive multimedia as a practical medium based on the responses of teachers and students after the test (3) Effective efficacy in increasing the learning activities of the students with a very good category and the learning results of the students before and after using interactive multimedia as a medium. Based on the findings of this study, it is concluded that interactive multimedia as a medium is valid, practical and effective to be used as a learning medium in black and white photo and color makeup lessons.



1. INTRODUCTION

Black and white photo make-up learning is one of the compulsory subjects in the Undergraduate Study Program of Makeup and Beauty Education, Faculty of Tourism and Hospitality, Padang State University. One of the competency standards is to do Photo/TV/Film make-up. Basic competence is to do black-and-white photo make-up. Learning black and white photo makeup requires students to be able to carry out the basic

concepts of black and white photo makeup, be able to master knowledge of black and white photo makeup and be able to apply colors in black and white photo makeup in the textbook. In addition, the ability in carrying out the practice of black and white photo makeup is very much needed by students in readiness to enter the world of work in the industry and the professionalism of students as beauticians.

The competence of black and white and color photo make-up is the most difficult material for students to understand because the material is dense where students are not able to determine the theme and design of black and color photo make-up. In addition, there is also a lack of facilities and infrastructure to improve the learning process in black and white and color makeup. The learning process that is carried out only uses available media, it has not been able to optimize the student learning process. Students still have difficulty mastering the basic concepts of black and white photo makeup, they have not been able to apply ingredients and cosmetics correctly and determine the color of facial makeup for black and white photo makeup. This can be seen from the results of the black and white photo makeup that is less than optimal. The results of black and white photo make-up are not optimal due to the limitations of materials and cosmetics that are not updated and the application techniques of materials and cosmetics are not appropriate. In order to be able to make up black and white photos, it requires mastery of concepts and principles to be able to apply them.

In the Black and White and Color Photo Makeup lesson, the steps for making up the character's face are described in job sheet and also explained through the demonstration method. Black and White and Color Photo Makeup lessons that have been carried out so far are by using the lecture method, question and answer, discussion, demonstration and practice. The media used during learning is only limited to white board media, power points and print media such as textbooks and job sheet.

Based on the author's experience during observations on April 20, 2021, the subject of black and white and color photo makeup lessons, interviewed with the lecturers in Photo/TV/Film and Character Make-up, mentioned that there were weaknesses in students in making up black and white and color photos because students had not fully mastered the basic concepts of black and white and color photo makeup and was less able to apply ingredients and cosmetics properly. Several attempts were made to help students by repeatedly explaining the concept of black and white and color photo make-up and re-demonstrating basic black and white and color photo make-up techniques individually. This causes the time required to be relatively long or less effective so that the learning process does not take place in accordance with the syllabus compiled. In the competence of Black and White and Color Photo Makeup, students often experience difficulties in learning black and white and color photo makeup learning activities, including determining the theme of black and white and color photo makeup, applying materials and cosmetics to black and white and color photo makeup, and suitability of makeup design in black and

white and color photo makeup applications. This is because students perceive that making up black and white and color photos is difficult and boring.

Based on the results of observations and discussions from several lecturers who teach black and white and color photo makeup lessons, it is assumed that in order to optimize black and white and color photo makeup lessons, it is necessary to have a learning media that can be used as a lecturer guide to direct student activities in learning and as an alternative. learning resources for students. In accordance with the opinion expressed by Azhar [1] the use of instructional media in the teaching and learning process can generate new desires and interests, generate motivation and stimulation of teaching and learning activities and even bring psychological effects on students.

One of them is by utilizing interactive multimedia in the development of Information and Communication Technology (ICT) which has touched all aspects of human life. In the teaching and learning activities of Cosmetology, especially in Black and White and Color Photo Makeup, interactive multimedia can be used as learning materials. Learning with interactive multimedia is very good for displaying a work process to improve students' motor skills. According to the Indonesian Dictionary (2006) [2], interactive multimedia is defined as recording live images or television programs through television shows. Interactive multimedia is a group of audio-visual media that combines visual and auditive (hearing sense). With this combination, students will more easily remember and understand a lesson. This was also expressed by Mell Silberman [3] who revealed that adding visuals to subjects can increase memory from 14% to 38%.

The results of the research [4] explained that the use of interactive multimedia learning media can be used to increase and improve the effectiveness of student learning outcomes in the character makeup subject, FPP UNP cosmetology and beauty education study program with research results that there is an increase in results student learning using learning achievement tests, observation sheets and student practice results using interactive multimedia learning media using character makeup. In addition to that, the research results [1], [2] explain that the use of interactive multimedia learning media in junior high schools that has been validated gets a good response to students by producing increased learning outcomes using learning media products interactive multimedia seen from the results of the pretest and posttest with the effective category. [3]–[5] states that interactive multimedia learning media is a learning medium that is very liked by many students. Interactive multimedia is a medium that connects several media elements involving integrated elements of text, graphics, images, photos, audio and animation.

From the above research results, it is expected that by developing interactive multimedia learning media, students can increase their interest in understanding and learning black and white and color photographic makeup competencies. The creation of Interactive Multimedia is made as attractive as possible to increase the interest of students in studying photographic makeup in black and white and color, so that students of the Department of Makeup and Beauty of the Faculty of Tourism and Hospitality of the Padang

State University are motivated to understand and study black magic and white and color photo makeup materials. which has been considered difficult to understand.

In this case the role of a lecturer as a developer of knowledge is very large to select and implement appropriate and efficient learning for students. Good learning is supported by a conducive learning atmosphere and good communication between students and lecturers. Therefore, lecturers must make the learning atmosphere communicative and interesting. The purpose of this research and development is to produce learning media using interactive multimedia that is valid, practical and effective for Black and White and Color Photo Makeup subjects in the Makeup and Beauty Education Study Program, Faculty of Tourism and Hospitality, Padang State University.

2. RESEARCH METHOD

This research uses research and development method (Research and Development). The research development model used is 4-D development model (four D) with stages: define, design, develop and disseminate [6].

The test subjects were students of the Study Program of Makeup and Beauty Education, Faculty of Tourism and Hospitality, Padang State University who were taking black and white and color photo makeup courses. Sources of data in this study are:

1. Media validation data were obtained from instruments filled out by content experts/experts, and a construct consisting of 5 expert lecturers.
2. The data on the practicality of the media were obtained from the implementation data of the video tutorial media and the use of the video tutorial media. Data on the implementation of the video tutorial media was obtained from the instrument filled out by the observer by observing the implementation of the video learning media during learning. Meanwhile, the practicality of video media is obtained from student and lecturer response data.
3. Media effectiveness data is obtained from student learning activities and student practice results after learning using video tutorial media.

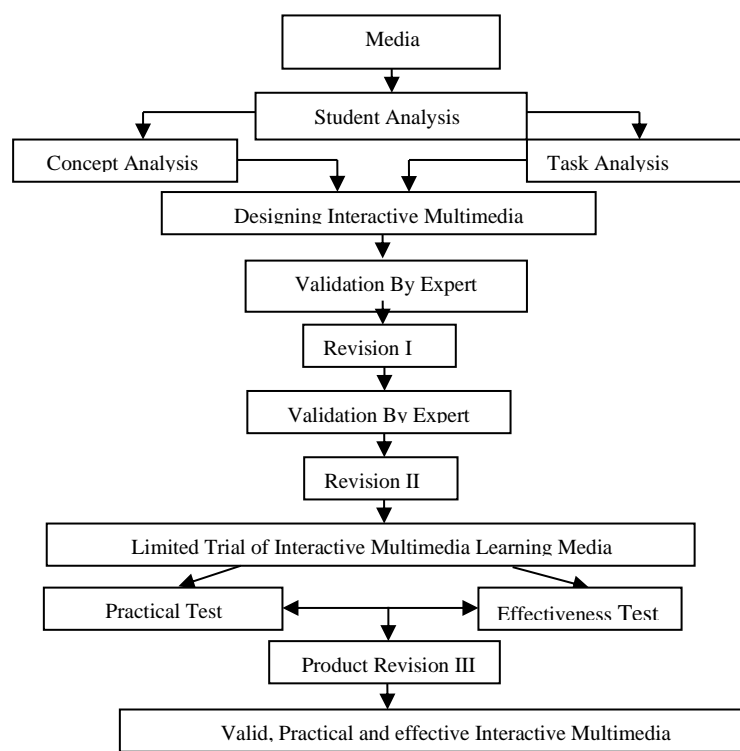


Figure 1. Learning Media Research Procedure Source: modified from Trianto [7]

The data that has been obtained in this study were analyzed to determine the feasibility of the developed learning tools. Data analysis was carried out in the following way:

1. Media validation analysis

$$\text{Validity value} = \frac{\text{Scores gained}}{\text{Maximum Score}} \times 100\% \dots\dots (1)$$

2. Analysis of media practicality data

$$\text{The value of practicality} = \frac{\text{Number of all scores}}{\text{Maximum Score}} \times 100\% \dots(2)$$

3. Analysis of media effectiveness data

Normality test

Normality test is a test of the normality of the data distribution. The data is declared normally distributed if the significance is greater than 0.05. By using the Kolmogorov-Smirnov method, it can be seen the normality of the data distribution by looking at the Asymp value. Sig (2-tailed). If the Asimp.Sig (2-tailed) value is greater than 0.05, it can be concluded that the data is normally distributed.

Homogeneity Test

$$F = \frac{S_1^2}{S_2^2}$$

Explanation:

S1= Variance of control class learning outcomes

S2 = Variance of experimental class learning outcomes

F = Group variance

Normality test

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{SD^2_{X1} + SD^2_{X2}}{N_1 - 1 + N_2 - 1}}}$$

Explanation:

t = Mean difference X-X

\bar{X}_1 = The average of the experimental group

\bar{X}_2 = Average control group

SD² = Standard deviation

N₁ = Number of experimental groups

N₂ = Number of control groups

3. RESULTS AND DISCUSSION

Research result

Black and white and color photo makeup tutorial video starts with an opening page and an interactive multimedia title as shown in figure 1.



Figure 2. Display of interactive multimedia opening pages and titles

then proceed with the profile of the interactive multimedia makeup maker with black and white and color photos as shown in Figure 3.



Figure 3. Profile display of the head of the interactive multimedia composition team for black and white and color make-up photos

The results of making a video tutorial produce a black and white photo makeup and color photo makeup. Black and white photo makeup tutorial videos and color photo makeup tutorials besides showing the working process of makeup, introduction to tools and materials are also shown in black and white and color photo makeup tutorial videos.

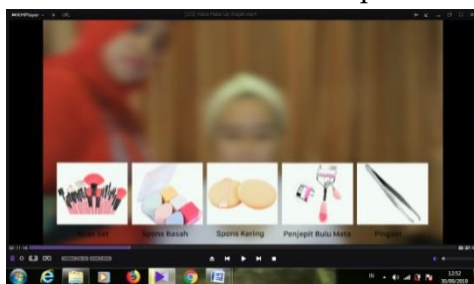


Figure 4. Display of various tools for black and white and color photo makeup in the video tutorial

The display above is the display at the time of introducing the materials and equipment needed for the black and white and color photo makeup work process. The video display of the introduction of the tool is accompanied by instrumental strains, writing and pictures to

clarify. Furthermore, the video tutorial display explains the work process of various kinds of makeup, namely: the working process of black and white photo makeup, and color photo makeup.



Figure 5. The appearance of giving lipstick on black and white photo makeup in the video tutorial

The display above is a view when explaining the process of working black and white photo makeup. It is conducted by shooting video systematically and sequentially. The results of the black and white photo make-up can be seen in Figure 6.



Figure 6. Display the results of black and white photo makeup in the video tutorial

Table 1. Results of Validation of Learning Media Video Tutorial.

Criteria Media	Validasi				Mean	Categori
	V1	V2	V3	V4		
Terms of content/material	89,29	96,43	96,43	85,71	91,65	Very valid
Construction requirements	87,50	87,50	81,25	90,63	86,72	valid
View terms	92,86	92,86	89,29	75,00	87,50	valid
Mean					88,62	

Table 2. The results of the Practicality Assessment of Learning Video Media by lecturers.

No	Indicator	Mean (%)	category
1.	Ease of use of media	81.25	Practical
2.	Time spent in implementation	81.25	Practical
3.	Easy to interpret	87.5	Practical
4.	Have the same equivalence	75	Practical
5.	Generate interest	81.25	Practical
Mean		81.25	Practical

Table 3. Learning Media Practicality Assessment Results by small group students.

No.	Indicator	Mean %	Categori
1.	Ease of using video media	90%	Practical
2.	Time spent in implementation	90%	Very practical
3.	Media appeal	90%	Practical
Mean		90%	Very Practical

Table 4. The results of the Practicality Assessment of Learning Media Interactive multimedia make-up black and white and color photos.

No.	Indicator	Mean %	Categori
1.	Ease of using video media	100%	Very Practical
2.	Time spent in implementation	92,31%	Very Practical
3.	Media appeal	100%	Very Practical
Mean		97,44%	Very Practical

The effectiveness test can be seen in the results of experimental research tests, where this research was carried out in four meetings. To draw conclusions from the results of the study, a hypothesis test was conducted using the t-test. Before conducting the t test, the normality test and homogeneity test were first carried out on the final test results. The results of the normality test showed that the class that did not use the video tutorial media and the class that used the video tutorial media showed that the distribution of the data was normal.

From the results of the homogeneity test of the two samples, the value of F_0 (F_{hit}) = 0.883 while F_{tab} = (2.60) at the real level = 0.05 with dk in the numerator = (18) and dk in the denominator = (18), because $F_{hit} < F_{tab}$ it can be concluded that the two sample groups have homogeneous variance.

After the homogeneity test and normality test, then proceed to test the hypothesis by testing t-test,

Table 5. the results of Testing With t-test

No	Group / Results	Results Class Average	t count	T tabke α 0,05
1	Control	74	20,78	2,086
2	Experiment	84,81		

It can be concluded that there is a significant difference in student learning outcomes between the control class that does not use video tutorial learning media compared to the experimental class that uses video tutorial learning media.

Discussion

Development of video tutorial learning media in black and white and color photo makeup courses based on the needs of students in the Makeup and Beauty Education Study Program. According to Hamalik,[8]. that learning is "a combination composed of human elements, materials, facilities, equipment, and procedures that influence each other to achieve learning objectives". Thus, it can be said that black and white and color photo makeup learning is a process carried out by teachers in teaching students to acquire knowledge [9], skills and attitudes through elements of human knowledge, materials, facilities and equipment to achieve the learning objectives of the black and white and color photo makeup course.

The problem that occurs in the black and white and color photo makeup course is that the student learning process is not yet optimal [10]. Students still have difficulty mastering the basic concepts of black and white and color photo makeup and have not been able to apply ingredients and cosmetics correctly and design black and white and color photo makeup. This is because the media used by the teacher is still limited, the learning of black and white and color photo makeup that has been carried out so far is by using the lecture method, question and answer, discussion, demonstration and practice. The media used during learning is only limited to white board media, power points and print media such as textbooks and worksheets.

The development of the video tutorial learning media is designed according to the needs and problems in the research, at this stage the researcher develops a detailed program that includes all video tutorial components, namely collecting black and white and color photo makeup videos. Then, make the video smaller, from MB to KB in size and combine all the videos into a video that is worth watching about how black and white and color photo makeup works. Each video is distinguished, such as an introduction to the tools, materials,

linen and cosmetics used, a video of the makeup work process in black and white and color photos according to their respective portions.

The video tutorial media is equipped with video, dubbing sound and text so that it is more interesting. Video tutorial media that has been designed according to black and white and color photo makeup materials and is equipped with instructions for use for teachers and students [6]–[8]. The process of making this tutorial video media is made in the Adobe Premiere Pro CS6 application. So, there is an interesting video tutorial learning media. The video that has been made is given a voice so that it is easy for students to understand the steps of the process.

Cheppy Riyana, [11-13]. states "learning video media is media that presents audio and visuals that contain good learning messages that contain concepts, principles, procedures, application theories for understanding a learning material". So it can be concluded that a video tutorial is a series of live pictures that are displayed by a teacher containing learning messages to help understanding a learning material as guidance or additional teaching material to a small group of students. In the video tutorial, information is presented in a unified whole of modified objects so that they seem to support each other in a depiction that seems to be alive. This can be proven from the ability of students after using the media to increase.

Based on the validity test of the video tutorial learning media, the average percentage score was 89.38% with a very valid category from the validator. According to Arikunto, 2006:63. that validation is a measure that shows the level of reliability or validity of a measuring instrument. Distribution of validation sheets to five validators consisting of education experts with 20 aspects of the assessment being assessed. Thus, it can be said that the video tutorial learning media can improve students' abilities in learning. [2], [5] opinion that interactive multimedia learning media is suitable for use if the product has been validated by experts.

The data above are also equipped with practical tests that have been carried out to see the practicality of the video tutorial learning media on black and white and color photo makeup eyes, with predetermined indicators. So, for the practicality given by the teacher through filling out the questionnaire, it was found that the average percentage score for all aspects of the assessment of the two teachers was calculated at 81.25% in the practical category. Meanwhile, the practicality analysis based on student assessments through questionnaires obtained the average percentage score for all aspects of the assessment of all students at a percentage score of 97.44% with a very practical category. Oktaviandy [15]

argues that to measure the practicality of the media, namely by seeing whether teachers (and other experts) consider that the black and white and color photo makeup learning media is easy and can be used by students [17]-[18]. In previous research according to [9] using interactive multimedia learning media can increase student creativity compared to using learning media using printed modules. Apart from that, multimedia learning media also produces a more effective learning style compared to using conventional learning media [10].

4. CONCLUSION

Based on the results of research and discussion, the following conclusions can be drawn: The learning media produced using video tutorials is suitable for learning makeup courses in black and white and color photos where the media display is audio-visual which displays real motion, sound and images, making it easier for students to understand the basic concepts of implementing make-up practice black and white and color photos. Video tutorial learning media in black and white and color photo makeup courses have been tested and declared valid, namely 89.38% in the valid category, practical with a value of 81.25% in the practical category and effectively used as a medium for learning makeup black and white and color photos.

The suggestions that can be submitted in developing a video tutorial learning media are as follows: For Lecturers of Black and White and Color Photo Makeup Courses, the Makeup and Beauty Education Study Program, Faculty of Tourism, Hospitality, Padang State University, it is recommended to use video tutorial learning media on black and white and color photo face subjects so that the learning process is more effective. For students, it is expected to take advantage of the use of video tutorial media as an independent learning medium so that they can better master the learning material. The Head of the Makeup and Beauty Education Study Program, Faculty of Tourism, Hospitality, Padang State University is expected to be able to provide supporting facilities for using video tutorials such as speakers/headphones and infocus so that the use of video tutorial media can be more optimal. Other researchers are expected to be able to continue and further develop this research better so that there can be more development of learning media, especially in the development of video tutorials.

REFERENCES

- [1] E. Febrianti, N. Wahyuningtyas, and N. Ratnawati, "Pengembangan Multimedia Interaktif 'Scriber' Untuk Peserta Didik Sekolah Menengah Pertama," vol. 19, pp. 275–289, 2021.
- [2] F. N. Maulidiyah, "Media Pembelajaran Multimedia Interaktif untuk Anak Tunagrahita Ringan Interactive Multimedia Learning Media for Children with Light Developmental Disabilities," no. 3, pp. 93–100, 2020.
- [3] P. Manurung, "Multimedia Interaktif Sebagai Media Pembelajaran Pada Masa Pandemi Covid 19," *Al-Fikru JURNAL*, vol. 14, no. 1, pp. 1–12, 2020.
- [4] M. Qistina *et al.*, "Primary : Jurnal Pendidikan Guru Sekolah Dasar Volume 8 Nomor 2 Oktober 2019," *Jurnal Pendidikan Guru Sekolah Dasar*, vol. 8, no. 2, pp. 160–172, 2019.
- [5] T. S. Haryanto, W. D. Dwiyoogo, and U. N. Malang, "Pengembangan Pembelajaran Permainan Bola Voli Menggunakan Media Interaktif Di SMP Negeri 6 Kabupaten Situbondo," *Pendidikan Jasmani*, vol. 25, no. 1, pp. 123–128, 2015.
- [6] T. A. S. Mentari, P. Minerva, and L. Rosalina, "Implementasi Multimedia Interaktif Untuk Meningkatkan Aktivitas Dan Hasil Belajar Rias Foto Hitam Putih dan Berwarna," *Jurnal Tambusai*, vol. 6, pp. 16546–16554, 2022.
- [7] T. A. S. Mentari, M. Lusiana, and R. Oktarina, "Penggunaan Multimedia Interaktif Dalam Pembelajaran Rias Foto Hitam Putih dan Berwarna Jurusan Tata Rias dan Kecantikan FPP UNP," *Jurnal Tata Rias dan Kecantikan*, vol. 1, no. 2, pp. 42–48, 2019.
- [8] T. A. S. Mentari, Giatman, and Fadhilah, "Kronologi Naskah : diterima 10 Oktober 2020 , direvisi 17 November 2020 , diputuskan 14 Desember 2020," *Jurnal Media Bahasa, Sastra, dan Budaya Wahana*, vol. 26, pp. 465–474, 2020.
- [9] R. Fitriasia and N. Janlinus, "Komparasi Penggunaan Modul Cetak dengan Multimedia Interaktif Terhadap Hasil Belajar Ditinjau dari Kreativitas Siswa," vol. 19, no. 2, pp. 67–74, 2019.
- [10] Suyitno, "Pengembangan Multimedia Interaktif Pengukuran Teknik Untuk Meningkatkan Hasil Belajar Siswa SMK," *Jurnal Pendidikan Teknologi dan Kejuruan*, vol. 23, no. 1, pp. 101–109, 2016.
- [13] A.M. Sardiman. (2011). *Interaksi dan Motivasi Belajar Mengajar*. Jakarta: Rajawali Press.
- [14] Azhar Arshad (2011). *Media Pembelajaran*. Cetakan ke15. Jakarta :rajawali press.
- [15] A.M. Sardiman. (2011). *Interaksi dan Motivasi Belajar Mengajar*. Jakarta: Rajawali Press.
- [16] Oemar Hamalik, 2010. *Proses Belajar Mengajar*. Jakarta: PT. Bumi Aksara
- [17] Rusman & Cepi Riyana, 2011. *Pembelajaran Berbasiss Teknologi Informasi dan Komunikasi*, Jakarta: Rajawali Pres.
- [18] Mentari, Tyas Asih Surya, Murni Astuti, and Linda Rosalina. "Develompmental of Media Learning Based on Tutorial Video at Character Make Up Subject in SMKN 6." (2017): 564-470.