



Beauty Media Learning using Android Mobile Phone

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Abstract— The purpose of this study were 1) produce digital media for education, using Android mobile phone 2) evaluate the response of questionnaire . There are two model application and two concept content of material for learning. The concept content of media learning such as material of learning, video learning, evaluation using question and choose the answer. In this application still limited use for student beauty or cosmetology especially tutorial video development of massage techniques on the scalp and hair care (creambath) and video application of slanted eyes makeup correction tutorial. Research and Development method (R&D) used to collect the data reviewer sheet media, test results and questionnaire responses. The result of this research format for development of tutorial video of massage techniques on the scalp and hair care (creambath) based on android mobile phone revealed to be very feasible, and got an average score 4.8. The test results of users is excellent, in terms of learning outcomes test sheet result data obtained an average score for 4.53. Users response expressed good in terms of sheet questionnaire responses obtained an average score for 4.44, the second shown that the average value of the results of the feasibility validation of applications by two expert lecturers multimedia was 89.5%, the results of the feasibility validation by three expert lecturers makeup was 88.7%. the feasibility response Bachelor student of Cosmetology Education of The State University of Surabaya level 2014 scored an average of 83.1%

Keywords — beauty, digital media learning, android, mobile phone

I. INTRODUCTION

Android is a mobile system operating (OS) on the linux kernel and now developed by google. Android is designed primarily for touchscreen mobile devices such as smartphones and tablet computers, with specialized user interfaces for televisions (Android TV), cars (Android Auto), and wrist watches (Android Wear). The OS uses touch inputs that loosely correspond to real-world actions, like swiping, tapping, pinching, and reverse pinching to manipulate on-screen objects, and a virtual keyboard. Despite being primarily designed for touchscreen input, it has also been used in game consoles, digital cameras, regular PCs, and other electronics. As of 2015, Android has the largest installed base of all operating systems as it is the most popular mobile operating system in the vast majority of countries. In many countries, all over the world, Android is the most popular tablet platform. [1]

Basically makeup is not something new for everyone, especially women, because makeup is an aspect to support the appearance. Makeup is an activity change or enhance the appearance of the face with the help of cosmetic ingredients and tools. In the cosmetology, it requires a lot of knowledge about anatomy, the characterization of the line color and composition also color gradation. In principle, makeup can cover flaws and highlight the advantages.[3]

Take the advantage of the its technology, the author will develop applications that use Android mobile phone as a medium of learning from the problems that occur in students S1 Makeup Education, State University of Surabaya or users that helps the process of learning the techniques of massage on the scalp and hair care (Creambath) by creating video tutorials and make application of slanted eyes makeup correction tutorial based on android mobile phone. The making of content using microsoft powerpoint, then convert powerpoint data (.ppt) to apk using i-Spring software, Andaired and Air-SDK.[2][3].

During this time the students in learning the scalp and hair care using only non-visual media (book) and the lack of visual media such as video tutorials massage techniques on the scalp and hair care (creambath) are used as guidelines in the study. So what happens students can only daydream about massage techniques creambath right before the tutor or lecturer gives examples of techniques of massage creambath because there is no media that can become a reference in learning

II. RELATED WORKS

Design and implementation of the android learning system, showed that the respondents were very receptive to the interactivity, accessibility, and convenience of the system, but they were quite frustrated with the occasional interruptions due to internet connectivity problems. Overall, the mobile learning system can be utilized as an inexpensive but potent learning tool that complements undergraduates' learning process.[4]

Wilaiporn Chaiyiyasit and Collegues proposed a development of management system for mobile learning application on android (OS) tablets and the purpose the study were 1) develop the management system for mobile learning application on Android (OS) Tablets;

2) evaluate the effectiveness of the management system for mobile learning application on Android (OS) Tablets; and 3) survey teachers' satisfaction towards the management system for mobile learning application on Android (OS) Tablets. The sample consisted of 330 teachers from schools in Ratchaburi Primary Educational Service Area 1. Tools for data collection includes the management system for mobile learning application, evaluation form for measuring effectiveness of the system, and evaluation form of users' satisfaction toward the system. The statistics used in the research consisted of Mean and Standard Deviation. The results revealed that effectiveness of the system rated by experts was at the very high level of 4.97, and 4.58 by users respectively. In terms of users' satisfaction, the highest level was at 4.60.[5]

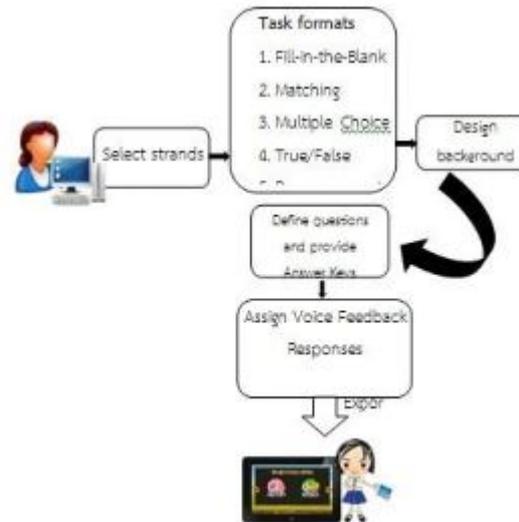


Figure 1. AEMS Operation for teacher by Wilaiporn Chaiyaisit

Kurniawan Teguh and Oky D. Nurhayati proposed an implementation of Android based Mobile Learning Application as a Flexible Learning Media, this research uses the Development and Research method a research to build and develop m-learning that can be used as a flexible learning media. Meanwhile, for the design of software, this research uses waterfall method. The result obtained from this research is that 95% of user from university students enjoy in using the application of mobile learning and it is only 5% does not enjoy. At last, it can be concluded that the use of the mobile learning application can make the learning process more flexible. [6]

III. METHOD

Educational research and development is a process used to develop and validate educational product. This research using *Research and Development design* (R&D), research conducted to produce a specific product, to test the effectiveness of the product. (Sugiono, 2012: 407) Subjects in this study were bachelor students Makeup Education (Cosmetology Education) 2014, total 20 students who have a smartphone Android.

Sugiono explain about R&D, there are 10 stages in the research and development (R&D), namely: the potential and problems, data collection, product design, design validation, design revisions, test products, product revision, utility testing, product revision and mass production, but in this study only uses eight stages, namely the potential and problems, data collection, product design, design validation, the revised design, product testing, product and product revision.[7]

Research R & D carried out by the following steps:

1. Potential and problems

The potential is utilized everything would have added value (Sugiono, 2012: 409). The problem is a deviation from what is considered to be the case. The eyes narrow is the kind of eyes that have small petals or eyelids folded into, for it needs to be corrected. However, not all women can do makeup correction slanted eyes properly. Along with the times, the smartphone is a common property of a person. Android-based applications in the makeup tutorial squint eye correction is expected to be used as a medium that makes it easy to learn cosmetology correction slanted eyes.

2. Gather information / data

The collection of information is obtained, used as material for planning a product that can overcome the existing problems. Gather information by interviewing the multimedia experts, makeup expert and bibliography study.

3. Product Design

The products produced in the form of Android applications in eye makeup tutorial correction slanted eyes. The appearance is the material makeup slanted eyes correction as shown below:

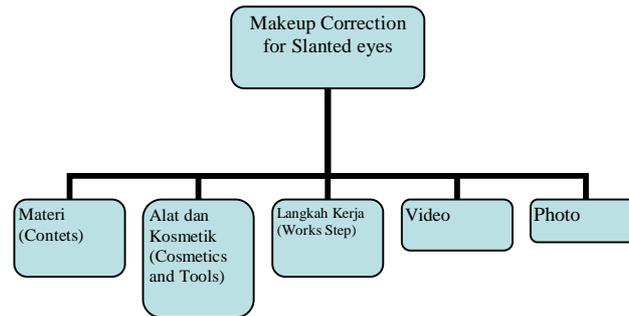


Figure 3. Flowchart diagram about material concepts

4. Validation Product Design

Validation is done with product design assessment to experts or experts who are experienced to assess the product designed, so that the product can be known advantages and disadvantages. In this study, the assessment of the product to 2 validator expert in makeup and and 3 validator expert in multimedia.

5. Revised Design

Once the design of products validated through expert assessment, it will be known something less to be corrected.

6. Phase Testing Design

Once the product design has been revised and then the product was carried out the test phase. The test is done at the student level S1 Makeup Education in 2014 as many as 20 people. In this stage the application is used each student, with comes with a description how to use them so as to facilitate the students and can be expected to obtain an assessment of the applications that have been developed.

7. Revised Products

At this stage the media which have gone through the test phase, it will be known for anything less then made revisions to correct deficiencies products.

6. Product

After going through the revision of the product, the product has improved and the product was finished and ready for use

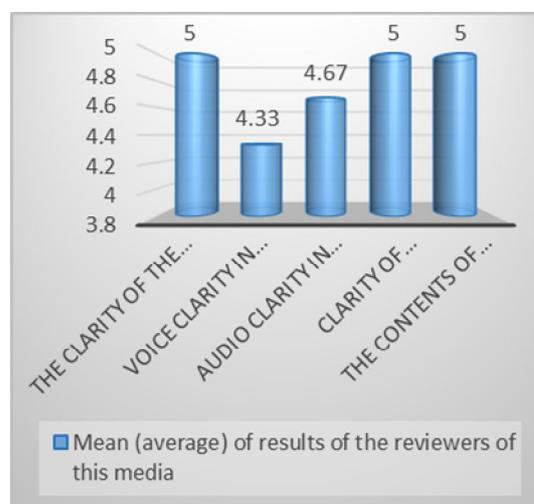


Diagram 1. Mean (average) of results of the reviewers of this media

According to the diagram can be explained that sheets of media reviewers are classified into five indicators of aspects of assessment, namely: the clarity of the video image tutorials, voice clarity in video tutorials, audio clarity in video tutorials, clarity of writing / language video tutorials, and the contents of the entire video tutorial. Based on how calculated from the average value of all aspects of media validation of the achievement scores of 4.8 and otherwise very feasible to use research data collection on the development of video tutorials entitled massage techniques on the scalp and hair care (creambath) android-based mobile phone.

1. Data Test

Test media video tutorials massage techniques on the scalp and hair care (cream bath) android-based mobile phone carried by the user 10 is calculated using the scores. Media test results can be seen in diagram 4.2 as follows:

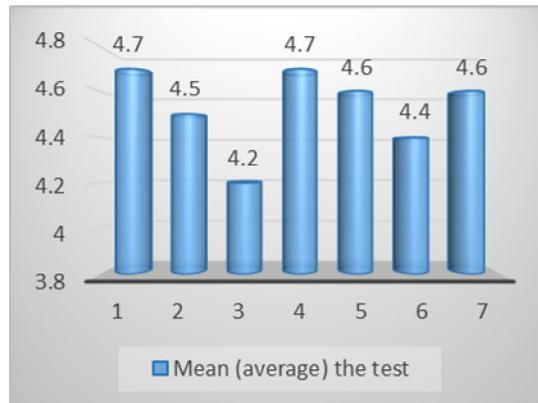


Diagram 2. Mean (average) the test

Based on the above diagram, the average test on users against the development of video tutorials massage techniques on the scalp and hair care (creambath) android-based mobile phone, which calculated an overall average of 4.53 and is expressed very well.

1. Data Sheets Results Questionnaire Response

Data from sheet questionnaire responses provided by 10 users, calculated using the average score or mean. Response results can be seen in diagram 4.3:

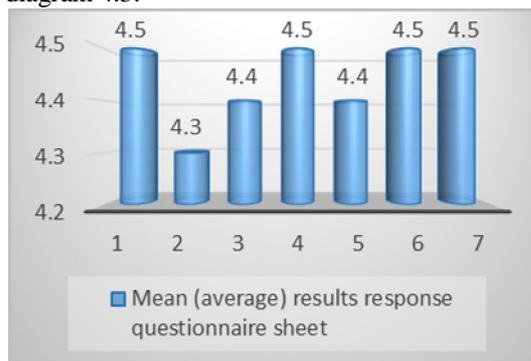


Diagram 3. Mean (average) results response questionnaire sheet

Based on the diagram 4.3 can be explained that the user response to the development of video tutorials massage techniques on the scalp and hair care (creambath) android-based mobile phone, then the average value is calculated as a whole amounted to 4.44 and declared good.

1. Data Results of the Review Media

Analysis of the results of the reviewers of this media is done by three expert lecturers media Surabaya State University. Analysis of media validation results calculated using the mean (average) and using the scores. Based on the results of the average score of each aspect is as follows:

a. Clarity Pictures Video Tutorial

Indicator assessment aspects of this tutorial video image clarity received an average score of 5. Score is because the image on the video tutorial stated very clearly. The results of the acquisition of the media reviewers' scores shows that the indicator aspects of assessment on the clarity of the video image that is very decent tutorial.

b. Voice clarity on the Video Tutorials

Indicator assessment aspects voice clarity in this tutorial video gets an average score of 4.33. The score is because the voice (dubbing) on video tutorials clearly stated. The results of the acquisition of the media reviewers' scores shows that the indicator on the assessment aspect voice clarity on the video tutorial that is feasible.

c. Clarity Audio in Video Tutorial

Indicator assessment aspects of audio clarity on this tutorial video gets an average score of 4.67, because the audio as a background in video tutorials clearly stated. The media reviewers' scores results indicate that the indicator on the assessment aspect of audio clarity on a video tutorial that is very feasible.

d. Clarity Writing / Language Video Tutorial

Indicators of clarity aspect of writing or language assessment in this tutorial video gets an average score of 5, because of the writing or on video tutorial language stated very clearly to be understood. The media reviewers' scores results show that indicators of aspects of assessment on the clarity of the writing or language on a video tutorial that is very feasible.

e. The contents of Overall Video Tutorial

Indicators aspects of the overall assessment of the contents of this tutorial video gets an average score of 5, because the entire contents of the otherwise excellent tutorial video. The results of the acquisition of the media reviewers' scores shows that the indicators aspect of the overall assessment on the content of the video tutorial that is very feasible.

1. Data Test

Test media video tutorials massage techniques on the scalp and hair care android-based mobile phone carried by the user 10 is calculated using the scores. Based on the results of the average score of each aspect is as follows:

- a. Rubbing motion (efflaurage) properly obtain an average value of 4.7 and is expressed very well.
- b. Dodder movement (vibration) properly obtain an average value of 4.5 and a declared good.
- c. Doing the twist / coiled properly obtain an average value of 4.2 and an otherwise good.
- d. Perform a pinch gesture (patrisage) properly obtain an average value of 4.7 and is expressed very well.
- e. Patting motion (tapotage) properly obtain an average value of 4.6 and an otherwise good.
- f. Creambath accuracy massage techniques step by step to get the average value of 4.4 and an otherwise good.
- g. Mastery of massage techniques creambath overall average scores of 4.6 and otherwise excellent.

2. Data Sheets Results Questionnaire Response

Data from sheet questionnaire responses provided by 10 users, calculated using the average score or mean. Based on the results of the average score of each aspect is as follows:

- a. The first statement of the overall aspect of the content of the video tutorials interesting and easy to understand, the response obtained from users, getting an average value of 4.5 and a declared good.
- b. The second aspect is the revelation of a video image that is displayed in the development of video tutorials massage techniques on the scalp and hair care (creambath) android-based mobile phone is clear and appropriate to be used as video tutorials, the response obtained from users, getting an average score of 4.3 , otherwise good response to the second aspect.
- c. The third aspect of revelation is dubbing (dubbing) is clearly in accordance with the step-by-step video tutorials, the response obtained from users, getting an average value of 4.4 otherwise good response to the third aspect.
- d. The fourth aspect of the statement is the audio (music) as a clear background according to video tutorials, the response obtained from the users get an average value of 4.5 is expressed well.
- e. The fifth aspect of the statement is the text that is displayed in the development of video tutorials massage techniques on the scalp and hair care (creambath) android-based mobile phone clear and readable, the response obtained from the users get an average value of 4.4, is expressed well.
- f. The sixth aspect of the statement is a step-by-step (step by step) treatment of scalp and hair (creambath) in the video tutorial easy to understand, the response obtained from the users get an average value of 4.5, is expressed well.
- g. The seventh aspect of the statement is the development of the development of video tutorials massage techniques on the scalp and hair care (creambath) android-based mobile phone is beneficial and can lead to self-learning. Responses were obtained from the users get an average value of 4.5, is expressed well.



Figure 4 View of first appearance



Figure 5 View of menu

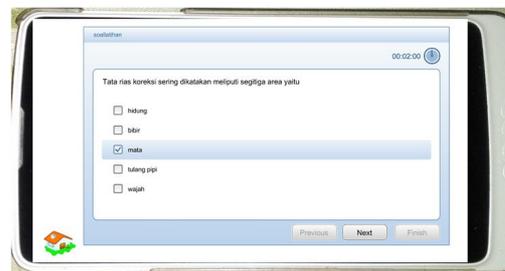
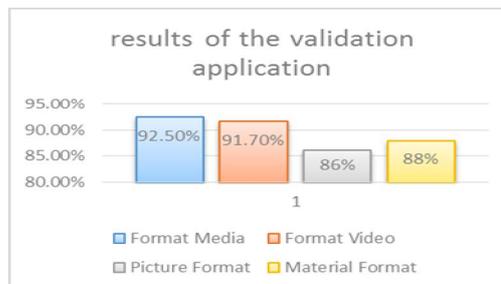


Figure 6 View of question as evaluation

Meanwhile, the research on the material correction slanted eyes as follows:

Results of research conducted descriptions presented data from Android-based application validation, validation of assessment material correction cosmetology slanted eyes and questionnaire responses

1. Results Validation Application



The percentage of all aspects that, can be categorized rated excellent / very decent ($\geq 81\%$)

Diagram 4. Diagram of the results of the validation application

2. Validation of Content Makeup Correction slanted eyes

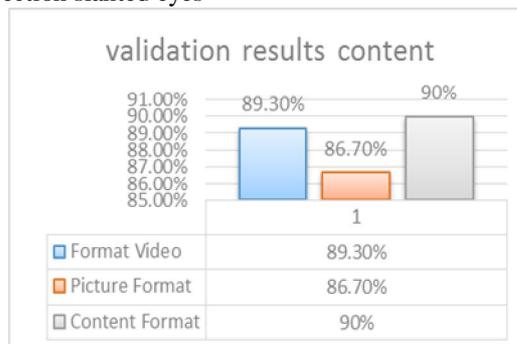


Diagram 5 Diagram validation results content

3. Analysis of Results of Questionnaire Responses

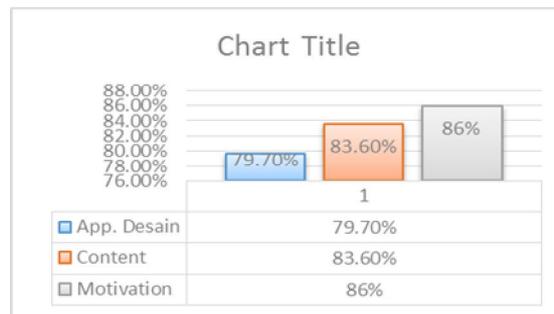


Diagram 6 diagrams response results

From the description of the results of assessment-based application development Android application in cosmetology correction tutorial slanted eyes can be concluded that the Android-based application that is developed very well be used as a medium of learning cosmetology correction slanted eyes. Based on the development of Android-based applications in the makeup tutorial slanted eye correction can be expressed very well and achieve optimal results.

IV. CONCLUSIONS

There are two research in this article, so can be concluded :

1. For all research, Make Android-based applications in cosmetology tutorial slanted-eye correction can be done by processing the data into a Power Point program APK with I-spring, Andaired and AIR_SDK
2. Results of material and design Android-based applications are developed based on the results of the validation by experts validator multimedia and makeup expert categorized as very good / very viable so it can be used as a material that can be learned
3. Development of Android-based applications developed received a positive response from the respondents that students S1 Makeup Education, State University of Surabaya, as shown by the results of questionnaire responses with the results of the overall average percentage of 83%, so it can be categorized very well / well worth once

REFERENCES

- [1] Manjoo, Farhad, "A Murky Road Ahead for Android, Despite Market Dominance", The New York Times, 2015. ISSN 0362-4331
- [2] Nurmawati. Yesie, "Development Tutorial Video Engineering In Massage Treatment Scalp And Hair (Creambath) Android Based Mobile Phone, 2015. Ejournal online Tata Rias vol.4 no. 3 Oktober 2015. www.ejournal.unesa.ac.id
- [3] Septaria. P. Irene. "Development Applications Android Mobile Phone-Based In Makeup Correction of Slanted Eyes", 2015. Ejournal online Tata Rias vol.4 no. 3 Oktober 2015. www.ejournal.unesa.ac.id
- [4] Fahri. H, Samsudin. K, "Mobile Learning Environment System (MLES):The case of Android-based Learning Application on Undergraduates' Learning", International Journal of Advanced Computer Science and Applications, Vol.3 No 3, 2012, pp. 63-66
- [5] Chaiyasit. Wilaiporn and Collegues, " Development of Management System for Mobile Learning Application on Android (OS) Tablets:Participatory Enhancement of Local Teacher' Competency" International Journal of The Computer, The Internet and Management Vol.23 No1 (January-April 2015) pp. 39-44
- [6] Teguh. K, Nurhayati D. Oky, "Implementation of Android based Mobile Learning Application as a Felxible Learning Media", International Journal of Science Issues Vol 11, Issue 3, No.1 May 2014, ISSN (online) 1694-0784 pp 168-174
- [7] Sugiono, "Metode Penelitian Kuantitatif, Kualitatif dan R&D". Bandung: Alfabeta, 2012