

The Development of Instructional Video in Manicure for Vocational High School Students of Skin Beauty Department

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Abstract— The instructional video was developed to teach Vocational High School students in learning Manicure in effective and efficient way independently or collectively in the classroom. This study aims to produce an instructional video in manicure which is decent used by students in the department of Skin Beauty. This study belongs to a research and development which uses the R&D model by Borg and Gall and combined with the instructional design model by Dick and Carey. The result of the validation and trial process shows that the developed instructional video is in the criteria of *very decent*. This result indicates that the media is proper to use in learning Manicure. The result of hypothesis testing proves that there is a significant difference between the learning outcomes of students who were taught Manicure with instructional video and students who were taught Manicure with *youtube* video. Therefore, the instructional video is proper and effective used in learning Manicure.

Keywords— Development; Instructional video; Manicure

I. INTRODUCTION

Education in Indonesia is increasing and has a strong competitiveness in science. Indonesia also does not lag in technology to support skills in implementing instructional. Various problems in instruction are harmonized and stabilized so that instructional conditions are created in accordance with the objectives to be achieved and can be obtained as optimal as possible. This is in accordance with Government Regulation No. 19 of 2005 concerning National Education Standards article 19 paragraph 1 whose contents: The learning process in the education unit is held interactively, inspirational, fun, challenging, motivating students to participate actively, as well as providing sufficient space for initiative, creativity, and independence according to talent, interests, and physical and psychological development of students. The purpose of this national education will be achieved if all parties participate in supporting the progress of education, teachers as educators in schools have an important role in education, especially in teaching and learning activities, teachers are required to master and understand various skills which can support the effectiveness and efficiency of teaching and learning activities.

One of the educational levels in Indonesia is the Vocational Middle School (SMK) which was built or

established to create graduates to be ready to work in accordance with their interests and talents. This is in accordance with the statement of the Law of the Republic of Indonesia No. 20 of 2003 concerning National Education System article 18 explained that: "Vocational education is secondary education that prepares students primarily to work in certain fields". This is in line with the opinion of Sutrisno and Budi [17] Vocational education places great importance on how the formation of the mindset and skills taught to students is as similar as possible to the conditions of the work environment that they will face later. This means that vocational education is education with a special intention to educate students to have certain specific skills that can be used when working later.

Based on this statement it is clear that vocational high schools focus on a particular expertise program or educational program. SMK has several goals that prepare students to enter the workforce and develop professionalism, prepare students to be able to have a career, be competent and be able to develop themselves, prepare staff middle level work to fill the needs of the business world and industry at present and in the future. SMK graduates are expected to have the ability to build and apply information and knowledge to think logically, critically, creatively and innovatively in decision making.

State Vocational School 1 Beringin is one of the Vocational High Schools in Deli Serdang Regency. State Vocational School 1 Beringin is a formal educational institution whose aim is to prepare students to enter the workforce and develop professional attitudes, be able to have a career, be able to be competent and be able to develop themselves prepare middle-level workers to fill the needs of the business world or the industrial world, as well as being productive, adaptive and creative citizens. State Vocational School 1 Beringin has several study programs, one of which is the beauty study program. Beauty is the art of beautifying and beautifying one's appearance. Manicure is one of the materials found in the field of skin beauty expertise in SMK 1 Beringin.

Manicure is the process of care for nails and hands that cover cleaning, cuticle care on the nails, forming, sorting and coloring nails (Harjanti, et al: 2009). The benefits of hand care are as follows: improve the condition of the skin so it becomes

soft and smooth, improves blood circulation and yellow sap, relaxes muscles and joints, provides beautiful feet and nails Niswah and Arita [13]. Manicure when viewed in terms of beauty is no less important than facial care. Attractive face makeup will decrease in value if it is not accompanied by the appearance of well-maintained hands and nails. Healthy fingers and toes with clean nails can give a beautiful and beautiful impression Kusantati [7].

Instructional process of manicure requires students to be able to explain the meaning of manicure, the benefits of manicure, explain tools, materials, linen and cosmetics for manicure, and explain the procedures for manicure. Students are expected to be able and skilled in doing manicure. To meet these standards many factors are expected to be integrated such as the ability of the teacher, the ability of students, as well as the existing facilities and infrastructure. Winarso [18] argues that students are expected to face increasingly greater challenges, along with the changing times. Educating is creating an environmental system that allows instructional to take place. This environmental system consists of components that influence each other, namely instructional goals to be achieved, the material taught by educators and here students must be encouraged to play an active role in the teaching and instructional process.

Through instructional, individual abilities can be developed, from those who do not know to know, from those who cannot. Potential developed through instructional that is balancing cognitive aspects, psychomotor aspects, and affective aspects of students. Cognitive aspects that are applied include: remembering, understanding, applying, analyzing, evaluating, and creating. Psychomotor aspects that are applied include work preparation, work processes, work results, work attitude, and work time. Aspects of attitude consists of spiritual attitudes associated with God and social attitudes that are related to others, as for these attitudes include: respect and appreciate religion, honesty, tolerance, courtesy, confidence, discipline, responsibility, cooperation / mutual cooperation. Based on the activeness of students in implementing instructional and improving instructional outcomes in cognitive, psychomotor, and affective aspects, a variety of instructional media is needed.

Based on the results of observations made in March 2018 at SMK 1 Beringin, researchers see that the teacher who teaches dominantly uses the lecture, assignment and demonstration methods so that the learning centered on the teacher makes the teacher play a lot of roles in presenting knowledge to learn and direct the student instructional process by in more detail. So students do not play an active role in conducting construction and search for knowledge. The use of instructional media in delivering manicure materials is still low, because the media used is still monotonous, in the form of YouTube videos, print media such as books, magazines, and modules. Therefore a variety of instructional media is needed that can increase student interest in instruction material. The use of audio-visual media such as films, videos and other media that use computers is still not implemented properly. Based on this, it is necessary to improve the media

that will be used in instruction to be more innovative and informative and increase student interest in instruction.

Achieving goals in the instructional process must be supported by hard work, enthusiasm and cooperation from all parties in the school. The teacher is one who has an important role in conducting teaching and instructional activities that must have competence. Pingge and Muhammad [14] state that teacher competence is the ability or ability of teachers to manage instructional as knowledge, skills and basic values reflected in the habits of thinking and acting. Sutrisno and Budi revealed that in instruction ideally there will always be interactions between teachers and students. Teachers and students are the two elements that are in the learning environment and utilize learning resources. Related to interactions between teachers and students, students' perceptions of the ability of teachers to teach and use learning resources such as instructional media can be used as feedback material on the quality of teaching and the ability of teachers to use instructional media.

Kusuma, instructional media is important for ongoing instructional in class, creative, communicative, and innovative instruction that can support in improving student instructional outcomes, in this case the word "media" comes from Latin and is a plural form from the word "medium", which literally means "intermediary or introduction". Hikmah and Iin state that the use of instructional media is needed to support the teaching instructional process in the classroom. Good instructional media are media that have aspects in increasing student interest and instructional achievement.

The use of instructional media is important for teachers to make the subject matter provided to students easily absorbed so that students understand it. Instructional media are used to be able to clarify the presentation of messages and information so that in the short instructional time a lot of information is conveyed. According to Mustholiq [12] instructional media have an important role in the teaching and learning process, because it can make the learning atmosphere more lively and meaningful. Arsyad [1] argues that in learning and learning activities, teachers at least utilize instructional media that can overcome time constraints, such as pictures, photos, slides, films, radio, videos, and so on.

Video as one of the technological advances has many positive influences and advancements for humans and their culture. With video, people are no longer difficult to get various information, knowledge and entertainment. Important events and events that occur throughout the world can be witnessed easily and quickly, this makes the vast world seem to be narrow and almost no longer known by the boundaries of time and place. In everyday life is familiar with the presence the video. The term video comes from the Latin language, namely from the word *vidi* or *visum* which means to see or have the power of vision. In the Big Indonesian Dictionary, video is a recording of a live image or television program to be broadcast via television (KBBI, 2017). According to Munir [11], "Video is a technology of capturing, recording, processing, and storing, transferring, and reconstructing sequences of still images by presenting scenes in motion

electronically". Video provides rich and lively resources for multimedia applications. Video is a moving image. If the object in the animation is artificial, then the object in the video is real. With technological advancements and the development of socio-culture today, watching videos is an activity that can be carried out by all groups. The video referred to in this study is a live image that has a visual and audio display, now the video has experienced rapid development along with the development of existing technology. Video has a variety of roles, in addition to being a means of entertainment, video can also function as a instructional media.

The development of instructional media on manicure subject matter is one of the efforts made in improving the quality of instructional processes and outcomes, with the development of instructional video media is expected to overcome the problems being faced, such as the monotony of the instructional process, instructional models that are still centered on the teacher, students who are passive in instruction, lack of instruction variation and boredom when instructional takes place.

In the process of instruction manicure, usually the media used by the teacher so far in learning are power point media, media images / photographs to be used as examples or just shown to students when the instructional process takes place. Examples of pictures / photos are sometimes shown directly, but the teacher more often shows these pictures / photos through the LCD, then in the instructional process the teacher more often only explains and practices learning directly. If students have difficulties during the learning process it will be difficult and time consuming to repeat again that has been explained by the teacher. So we need a media that is able to provide good visualization so students can better understand the material being taught. Instructional videos are considered to make it easier for students to understand the material presented and can be a medium of introduction for both teachers and students before practice. Besides that video can also be used as a instructional media independently by students. The instructional video media was chosen by researchers for various reasons, namely: 1) Adequate facilities in schools for the instructional process using video media. 2) This video media will be packaged as attractive as possible and in it contains material that explains the steps of manicure in detail. 3) Video media is expected to help students manicure materials.

Video can be used as a instructional media to the maximum if the teacher can choose the right lessons to be conveyed through video media. Video has many advantages, including: 1) overcoming the limitations of distance and time; 2) Video can be repeated if necessary to add clarity; 3) It is very good to explain a process and skills Munadi[10]. manicure video media will be designed using development principles that pay attention to various aspects that affect instructional success. With the hope of making students motivated in instruction, optimizing the physical and mental potential of students when instructional takes place. And can be used according to the level of speed of thinking of students in understanding the material and their needs.

The use of instructional video media is an efficient media selection because it facilitates educators in delivering material, this is supported by several studies that have been done before, such as that conducted by Fauzan and Dwi [5] entitled "Development of Video-Based instructional Media in Frais Machining Theory". From these studies it can be concluded that the instructional video media created are suitable for use in the learning process. Video-based milling machineries in the form of mp4 files are complemented by introductory music, videos, narrators and animation. The feasibility of video-based insructional media from material experts obtained a percentage of 96.50% with a very good classification, from the media experts obtained a percentage of 80.63% with a very good classification, from the teacher assistants obtained a percentage of 76.25% with a very good classification and based on student response responses obtained a percentage of 80.52 % with classification strongly agree to use this instructional media.

Similar research was also carried out by Fahmindrayanti and Dewi [4] entitled "Development of Video-Based Instructional Media for Basic Competencies Describing Hair Trimming for Solid Techniques for Grade XI Hair Beauty Students in SMK Negeri 1 Buduran Sidoarjo". The results of this study state that video instructional media for basic competencies outlining solid hair trimming is appropriate for use in the instructional process. The implementation of instruction by applying video-based instructional media to basic competencies outlines hair trimming of solid techniques obtains an overall average score that falls into the well-implemented criteria. Based on the average assessment of student responses to video-based instructional media, the use of video-based instructional media on the basic competencies of doing hair trimming techniques is solid getting a good response from students of class XI Hair Beauty in SMK Negeri 1 Buduran, Sidoarjo. In addition, after applying video-based instructional media to the basic competencies outlining hair trimming of solid techniques, students obtain satisfying learning outcomes in the cognitive and psychomotor domains. Average cognitive 1 was 24.76, cognitive 2 was 27.15, and psychomotor was 59.53. For the average class, values of 85.58 were obtained and 100% of students were complete. So, the use of video as a instructional media can help students get grades above the KKM.

Differences in research to be developed with previous research is on the material to be discussed. The characteristics of the material developed are not the same as the material that has been developed in the previous media, where in the lessons of manicure required drawings that are close to real, in this study manicure procedures will be carried out in great detail, and in accordance with the stages the implementation of manicure. In addition, the instructional media that will be developed is a combination of several softwares, hoping to be more interesting and motivate students to learn manicure. Based on the description above, the researchers are interested in conducting research and development of instructional video media for manicure majoring in skin beauty majors at SMK Negeri 1 Beringin.

II. METHOD

The research will be conducted at the Beringin 1 Vocational High School (SMK) which is located at Jalan. Pendidikan No. 3 Beringin. The study was conducted on students of class X Department of Skin Cosmetology odd semester 2018/2019, the research was carried out in August to November 2018.

The development model is a series of procedures in order to produce instructional media manicure. The model developed refers to the Research and Development (R&D) adaptation of the Borg & Gall [2] model combined with the instructional development model of the Dick and Carey [3].

The trial is intended to collect data in the formative evaluation framework which is used as a basis for determining whether the product has been truly feasible to use and interesting. Activities undertaken among other things: (1) Expert validation of manicure materials; (2) Validation of instructional design experts; (3) Validation of instructional video media experts; (4) conceptual analysis; (5) Phase I product revisions; (6) individual trials; (7) Conceptual and product analysis; (8) Phase II product revisions; (9) Small group trials; (10) Phase III product revisions; (11) Field trials on 35 students; (12) An assessment of the attractiveness and feasibility of the product; (13) Stage IV evaluation; (14) Minor revisions; (15) Test the effectiveness of the product.

The instruments used in this study are (1) Questionnaire sheet for material experts, (2) Questionnaire sheet for instructional design experts, (3) Questionnaire sheet for media experts, and (4) Questionnaire sheet for students. The instruments developed in the study this was adopted from Sriadhi [15].

Data analysis techniques that will be used are descriptive and inferential techniques. Descriptive techniques are statistics used to analyze data by describing data that has been collected as it is without intending to make conclusions that apply to the public or generalizations. And inferential techniques are statistical techniques for analyzing sample data and the results are applied to populations.

Data analysis techniques were performed on combining the value of learning test results (cognitive) which is 40% and the value of practical results (psychomotor) which is 60%. In line with the opinion of Lund and Veal [8]. The value for each domain is given exactly the same weight, the consideration of the assessment domain consists of psychomotor 60% and cognitive 40% so that the percentage of ratings becomes 100%. The steps of data analysis techniques are looking for a mean value, standard deviation, normality test. To see the value of the effectiveness of the instructional media being experimented with use the following formula for calculating effectiveness Sugiyono [16]:

$$X = \frac{\text{jumlah skor yang diperoleh}}{\text{jumlah skor ideal seluruh item}} \times 100\% \tag{3}$$

With the evaluation criteria as written in table 1 below:

TABLE 1. ASSESSMENT CRITERIA

No	Category	Range score
1	Very Good	86% X 100%
2	Good	76% X < 85%
3	Poor	66% X < 75%
4	Not Good	56% X < 65%
5	Very Poor	0 % X < 55%

X = Empirical Score

III. RESULTS AND DISCUSSION

A. Discussion of Product Feasibility Test Results

Product development of instructional video media manicure is a instruction material that has been developed by paying attention to aspects of instruction and media as a instruction design principle. The product development research undertaken is aimed at producing a product in the form of a instructional media manicure for class X students majoring in skin beauty at SMK 1 Beringin that is used to improve the learning process and student competence.

Some of the uses and benefits in the use of video media for instruction manicure are as follows: (1) the material is easy to understand because the concepts presented are planned to facilitate students and systematically, (2) video tutorials for manicure are available, so students can see firsthand how to do manicure with real and moving images not just still images, (3) instructional media video manicure gives students the opportunity to learn at each individual's pace, (4) learn faster and more interesting so that it does not cause boredom because it is equipped with a variety of images and animations, (5) there are opportunities to build cognitive and student applications. psychomotor competencies during learning, (6) instructional media video manicure can also be used as an alternative to conventional and individual instructional media.

Based on the results of the validation, the instructional media product manicure was declared suitable for use in instructional media manicure. Instructional media video manicure developed have met the standards based on the design of instructional video media development standards and instructional material standards that can be seen in table 2 below:

TABLE II. SUMMARY OF THE RESULTS OF THE FEASIBILITY OF PRODUCTS THAT HAVE BEEN VALIDATED BY EXPERTS AND TESTS

No	Indicator	Percentage Average	Criteria
1	Expert material	90,97%	Very Proper
2	Design experts	92,45%	Very Proper

3	Media experts	92,78%	Very Proper
4	Individual trials	91,67%	Very Proper
5	Small group trials	92,90%	Very Proper
6	Field trials	94,74%	Very Proper
Average		92,59%	Very Proper

The results of the questionnaire that was submitted to the material experts gave a response of 90.97% that the learning video media was appropriate because it contained material and delivery criteria that met the requirements for delivering messages to students. The instructional design expert gave a response of 92.45% that the instructional media video manicure was appropriate because it had been designed in such a way and met the instructional design standards. Media experts gave a response of 92.78% that instructional media video manicure was appropriate to use because it had fulfilled the principles and criteria for the development of instructional video media. Individual trial results gave a 91.67% response that the instructional media video manicure worthy of use. The results of small group trials give 92.90% responses that the instructional media video manicure is feasible to use. The results of the field trials gave a response of 94.74% that the instructional media video manicure was suitable for use in instruction.

Based on the results of validation and testing, the instructional media manicure are very feasible to use in the instructional process manicure, with the instructional media video instruction can be carried out effectively.

B. Discussion of Research Results of Product Effectiveness Test

The media is said to be feasible after showing satisfactory results in achieving the stated goals. In this case, a product trial is conducted in the instructional process. The effectiveness of the media obtained from the value of student instructional outcomes. Miarso [9] states that indicators that can be used to determine effectiveness in the instructional process are: (a) good material organization, (b) effective communication, (c) mastery and enthusiasm for the subject matter, (d) positive attitude towards students, (e) giving fair grades, (f) flexibility in the instructional approach, and (g) good student instructional outcomes.

Based on the results of data processing research conducted, there are differences in instruction outcomes of manicure using instructional media video and students who are taught using YouTube videos are the average instructional outcomes of manicure using instructional media video higher than students who were taught using youtube videos. This can be

seen from the results of the average value of manicure taught with instructional video media that is equal to 90.42%. While the results of instruction manicure that are taught using YouTube is 84.49%. This proves that the use of instructional video media is more feasible and effective in increasing the competence and knowledge of students in instruction manicure than using YouTube videos because the instructional media for manicure is arranged based on competency and instruction objectives as well as access to get instructional video media is obtained within the scope of the school while the youtube video is not systematically arranged so that the instruction objectives to be achieved are not clear and youtube videos can be accessed by anyone who wants to see it.

IV. CONCLUSION

Based on the formulation, objectives, research results, and research discussions on the development of instructional video media for hand care and nail makeup previously stated, it can be concluded as follows:

- Products in the form instructional video media manicure for Grade X students of SMK Negeri 1 Beringin have results that are feasible to be the final product that can be disseminated and implemented to users. This is made clear by several stages, namely validation to material experts, instructional design experts, media experts, individual trials, small group trials and field trials. All assessment results obtained at that stage obtained a total score of 92.59% included in the "very feasible" category.
- Based on the results of data processing, the average value of student instruction outcomes using instructional media manicure with student instructional outcomes using youtube media shows that students who use nstructional video manicure are "more effective" than students who are using YouTube media. This is indicated by the calculation results obtained t count = 3.18 and t table = 1.99 where $3.18 > 1.99$ for the significance level α of 0.05. The effectiveness value of instructional video manicure is higher that is equal to 91.19% than the value of effectiveness using YouTube videos that is equal to 83.93%.

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