

DEVELOPING A MACROMEDIA FLASH INSTRUCTIONAL VIDEO ON DRESS MAKING PROGRAM FOR GRADE XI MADRASAH ALIYAH

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ABSTRACT

The purpose of this research wereto develop an Macromedia Flash instructional video and determine the validity, practicality, and effectivity on Dress Making Program. In this research, researcher utilized a Research and Development (R&D) method, and 4D (four-D) model that was developed by Thiagarajan 1974. There were four steps in 4D model: define, design, develop and disseminate. The instructional video on Dress Making videowas designed by using Macromedia Flash 8. The finding at this research was a valid, practice, and effective instructional video on Dress Making subject. Based on the finding, it can be concluded that the new instructional design has been significantly improved the learning process on the Dress Making instructional program at Madrasah Aliyah.

Keywords: *Instructional video, Dress Making, Macromedia Flash 8, 4D (four-D)*

1. INTRODUCTION

Video learning is very useful and needs to be developed to support learning activities in every level of education. As a non-print teaching materials, learning videos can present moving images, supported by narrative descriptions of learning materials so as to enable the two senses of students at once, namely the sense of sight and hearing. Learning videos can be used classically, displayed in front of the classroom using LCD, besides learning videos can also be used by students individually, to learn more about learning material outside of lesson time as well as guidance in completing written task and practice task. Astuti (2013) and Trimailuzi (2015) stated that video learning proved excellent for improving students' learning effectiveness and better learning outcomes than students' learning outcomes using conventional media. Because of the various benefits, as mentioned above, education practitioners in Indonesia are starting to devote their attention to developing valid, effective and practical learning videos for each subject.

Currently learning videos are available in almost all levels of education in Indonesia. Video learning there are deliberately designed for learning, so as to facilitate teachers in teaching. The teacher's role turns out to be a facilitator of learning, which makes it easy for learners to learn (Karwati and Priansa, 2014: 238). Video learning can be used over and over again without having to create again as long as it is still relevant to the curriculum and syllabus. On the other hand, there are videos that are not designed for learning, but can be used or used to explain

something related to learning, can activate students' creativity and make learning more meaningful for students. It's just that video media like this require further explanation and direction from the teacher. Some teachers have successfully used, created and developed video learning in accordance with their respective subjects so as to create a more enjoyable learning process.

The well-packaged learning videos using various applications that have developed according to Susilana, (2009: 9) have various benefits for teachers and students, including: (1) Easier to be absorbed by students as presented with moving pictures accompanied by easy-to-understand narrative descriptions. (2) Much more effective in terms of time and effort. (3) Much more interesting so it can increase learning motivation. (4) With the viewing of moving pictures and sounds of companions make students able to learn independently. (5) Creating a uniform understanding for each student about the material presented. On the other hand Dale in Arsyad (2011: 23) expressed the benefits of using video learning such as: (1) Creating freshness with the variety of learning process. (2) Much more motivate student learning. (3) Able to broaden students' insights and learning experiences as they reflect non verbalistic learning. (4) Students can learn independently.

Video learning can be used on all subjects, including skill subjects. The use of instructional videos can showcase the techniques and work steps that must be done in making a product as a guide in practical learning. This is in line with the opinions of Kustandi and Sutjipto (2011) which state that video can represent an object moving along with a natural voice or an appropriate sound and can explain complex concepts. The use of learning videos can facilitate students' understanding in learning skills as life skill programs so that learners have the provision to work and strive to achieve a better standard of living.

Based on the author's initial research on some Madrasah Aliyah, the authors found that the learning process has not been effective in the implementation of skill subjects, students tend to have difficulty understanding the learning materials, still upside down when putting together the parts of clothing and sewing techniques used are still not perfect. This is due to several factors, among which there are less variations of instructional learning media, and the lack of valid, practical, and effective learning media to visualize sewing techniques on the subject of dress code. The method of demonstration on dress sewing material is not sufficient enough yet. Each step should be explained in detail so it takes a very long time. The capture of students is different, so repeated demonstrations for students who lack understanding will take a lot of time in the learning process. obtain graduates who have competence in the field of clothing, it is needed a planning effective learning methods that can be applied in the learning process. The method can be a refinement of learning materials, how to present the material in the classroom, and find and develop learning media.

Media used in learning is called learning media, which has a function as an intermediary message, in this case is the subject matter that is conveyed to the learners. According to Sadiman et al (2014:7) "Learning media is everything that can be used to channel the message from the sender to the message recipient so that it can stimulate the thoughts, feelings, attention and interests and training students in such a way that the learning process occurs". While Kustandi and Sutjipto (2011: 9) concluded from some experts opinion that "Media learning is a tool that can help teaching and learning process and function to clarify the meaning of the message conveyed, so as to achieve the goal of learning with better and perfect.

According to Zumara (2010: 8), the media is very useful to support the learning process, such benefits include: (1) Learning media can overcome the limitations and differences of experience owned by the students. (2) Learning media can overcome the limitations of the senses, space, and time. (3) Learning media allows for direct interaction between students and their environment. (4) The media produces uniform observations (5) The media can embed the basic concepts that are true, concrete and realistic. (6) The media generate motivation and stimulation of children to learn. (7) The media evokes the desire and interest of the teacher. (8) The media provides an integral or thorough experience from the concrete to the abstract.

Based on the above opinion can be concluded that the learning media is a tool as a channel distributor and as an intermediary who deliver the subject matter by the teacher (the message source) to learners (the recipient of the message) in order to achieve the learning objectives. Learning is declared effective when using the media learning, students better understand the subject matter presented by the teacher. Learning Dress Fashion also requires some learning media as a tool for delivering messages effectively and efficiently so as to encourage students to better understand the steps in the implementation of practice and can raise the spirit of students in taking step by step in the process of fashion. The purpose of this development research is to produce instructional media in the form of learning video of fashion sewing technique that is valid, practical and effective on learning Dress with Basic Competence Sewing Blouse, which can support student's learning needs in improving student learning outcomes.

2. METHOD

This research develops a learning video of fashion sewing technique. The learning video clothing sewing technique aims to increase motivation and develop students' understanding of the sewing material of the blouse that is delivered, so that the students can master any material well-informed. The procedure of developing the learning video of fashion sewing technique in the subject of dressing is using 4-D (four-D) development model. The development process consists of four stages: (1) define (definition); design (design); (3) develop (development); (4) disseminate (spread).

Validity of learning video sewing technique consists of 2 categories, for validation of learning video is done by two media experts, that is the lecturer of FT UNP then for material validation is done by the teacher of Dress Fashion who teaches at Madrasah Aliyah. After the media is declared valid, then tested the development to see the practicality and effectiveness. Test of practicability is obtained from the questionnaire of practicality of learning technique video sewing fashion by the teacher of Clothing and Students of Dress Design in Madrasah Aliyah. The effectiveness test is obtained from the calculation of the increase of student learning result on pretest and posttest by using gain score. The subjects of this experiment were 21 (twenty-one) students of class XII, who were following the subjects of Dress Fashion with Basic Competence (BC) of Sewing Blouse in the July-December semester of the academic year 2016 at MAN 1 Bukittinggi. The research data were obtained from video validation instruments, validation tools for validator material, students 'and teachers' video construction instruments, and effectiveness instruments obtained from pretest and posttest psychomotor assessments.

Procedure development of learning video sewing technique fashion subject of this dress program using 4-D development model (four-D). (Trianto 2009: 189). As in the picture below:

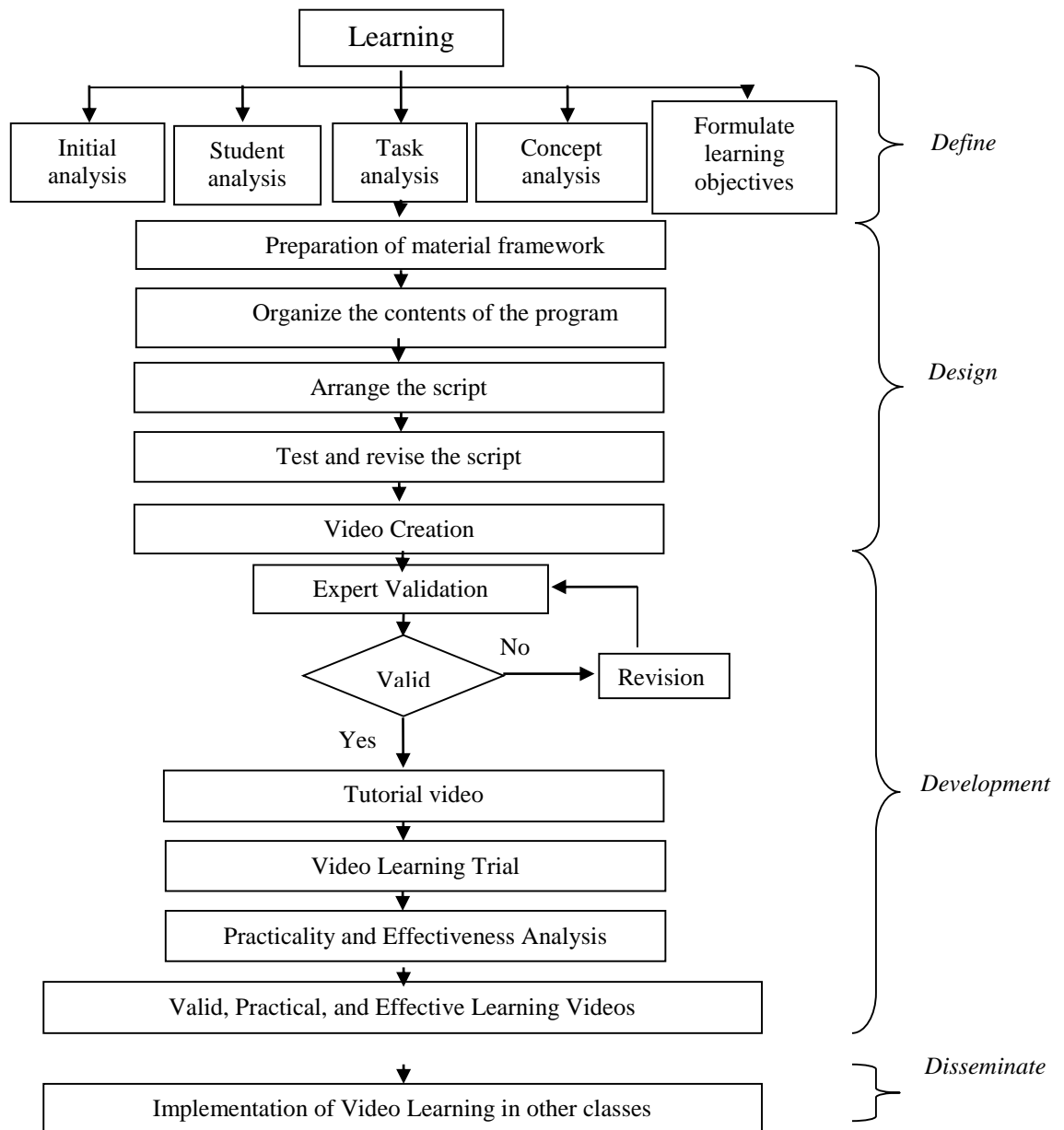


Figure 1. Video Development Procedure of Dressmaking Technique on Fashion Classes Subject at Madrasah Aliyah

The technique used to collect data in this research is observation, interview and questionnaire. The data analysis is done on the initial data obtained and the data validation result of initial product development by the expert (expert). The data analysis technique used is descriptive analysis technique, namely describing the

validity, validity and effectiveness of the use of Learning Fashion Tailoring Fashion Techniques on the Subject of Dress in Madrasah Aliyah.

3. RESULTS AND DISCUSSION

Skills taught in Madrasah Aliyah as a life skills program in the formal education path, aimed at providing supplies to students to work and strive so as to support the achievement of a better standard of living, as expressed by the Directorate of Higher Education 2002. Sewing women's clothing is one of the eyes practical lessons given in each Madrasah Aliyah which organizes learning of dress module that aims agarsiswa able to sew clothes with a sewing technique that is true.

One of the efforts that must be done to create a professional and competitive graduates and ready to use is to make innovation and creativity in the learning process that is using learning media that can attract students' attention as well as improve student motivation to learn and facilitate students to get messages and information submitted in a subject matter. The development of learning videos is done to create effective learning by conducting fun learning so that students are motivated and easy to understand sewing techniques in the manufacture of clothing.

Development of Fashion Learning Videos on Dressmaking Courses in Fashion Subjects in Madrasah Aliyah uses the four-D method (Define, Design, Development and Disseminate). This development model was developed by Thiagarajan contained in Trianto's book (2010: 94).

1. Definition Stage (define)

The defining stage is done to find out the basic problem faced in learning Dress Fashion, so that required a development of teaching materials. Through this analysis, obtained the description of facts, expectations and alternative solutions to basic problems that facilitate the determination or selection of teaching materials developed. This stage also analyzes the terms of product development according to user requirements. The definitions are made through literature studies or preliminary research. There are five things done in this stage, namely front end analysis, student analysis, task analysis, and concept analysis, and the formulation of learning objectives.

2. Design Phase (design)

After performing the initial analysis in the definition stage (define) then the next step is the design stage. At this design stage there are several activities, namely choosing and compiling the framework of learning materials, selecting and organizing the program content, compile scripts, test and revise the script, as well as producing learning video sewing technique.

3. Development Stage (develop)

This development stage aims to produce a valid, practical and effective sewing technique learning video. At this stage of development, there are two kinds of activities, namely learning video validation and development test. The validation of learning video consists of validation stage by expert media validator and expert validator materials, while in the development trial activity there is a practicality test activity to learning video sewing technique techniques conducted by teachers and students, as well as effectiveness test on learning videos obtained from the completeness of student learning outcomes after using the learning video sewing technique.

a) Study Video Validation Discussion

Learning video validation test stages are conducted so that the learning video of sewing technique developed by this technique can be known feasibility based on the assessment of material experts and media experts. The learning video validator consists of 4 persons, two persons as media expert validator (two media experts of State University of Padang) and two material material validators (one teacher in Man Koto Baru Padang Panjang Clothing and one Dressmaker in MAN 1 Padang).

The data from the validator is obtained through a validity questionnaire filled by each validator and discussion by showing the learning video of the sewing technique. The results of validation by media experts showed that the learning video sewing technique has an average value of the validity given by the 1st validator and the 2nd validator of 0.92 with the category of very high prevalence. This is also in line with previous research conducted by Trimailuzi (2015) showing a learning video developed in a valid category with a percentage of 0.98 and Jumaisarki (2016) which shows the percentage of average achievement scores of 0.83 in a valid category, viewed from the aspect of display quality / presentation of the media, learning video sewing fashion techniques on the subject of this dress is worth to be tested in the field. Furthermore, the average validation of learning materials of fashion sewing technique video from the 3rd and 4th validators obtained value of 0.93 then the prevalence category from the learning material of the sewing technique is very high. The results of this assessment are also in line with the results of previous research conducted by Jumaisarki (2016) with a percentage of the validity of 0.88 so that in terms of the truth / accuracy of the material in the media, learning video sewing clothes are worthy to be tested in the field.

Based on the suggestions and judgments of the validator in terms of media and material then made a revision of the learning video sewing technique fashion, so the learning video sewing technique developed tailored to be tested as a source of learning on the subject of Fashion Clothing. Then the result of analysis of validity video data of fashion sewing technique study can be said valid in accordance with the opinion of Akker (1999) in Neliyarti (2016: 94) stating that the component of the material should be based on the validity of the content (knowledge) and all components related consistently with each other (construct validity).

b) Discussion of Development Trials

1) Practical Video Learning Taknik Sewing Clothing

Practical data of fashionable sewing technique learning video was obtained through experiments conducted at MAN 1 Bukittinggi. Assessment of the practicality of the learning video of this fashion sewing technique is obtained from the questionnaire filled by the subject teacher Fashion Clothing with a value of 100%. These results indicate that the learning video sewing technique technique is "very practical" and can facilitate the teacher in the implementation of the learning process and assist teachers in implementing the concept of learning materials Fashion Clothing, especially on the material process of sewing blouses. In addition to the assessment of the subject teachers Fashion Clothing, the practicality of learning video sewing sewing technique is also assessed based on student responses and the results in the questionnaire response of the students obtained a value of 89.09 so it can be concluded that the learning

video sewing sewing techniques developed are practical with the category of very practical.

The practicality of using instructional video in accordance with the opinion of Akker (1999) in Neliyarti (2016: 96) which states that there are three quality criteria of a product that is validity, practicality and effectiveness. From this opinion it is clear that the practicality of a developed product becomes a necessity to determine the quality a product developed. Practical judgment may refer to aspects of quality of conformity between intended or intended to be perceived or directed to operations (Akker, 1999 in Neliyarti, 2016: 96).

From the results of practicality test based on Akker's opinion, it can be concluded that this developed learning video can be used easily by the students as the subject of trial. Thus concluded that the results of research in terms of the practicality of the use of learning videos is learning video sewing techniques easy to use clothing.

2) Discussion of Learning Video Effectiveness Teknik Dress Making

The effectiveness of learning videos is done with the aim of assessing whether learning videos developed can be used in accordance with expectations to improve student learning outcomes. The effectiveness test can be seen through comparison of value from psychomotor domain, that is from the evaluation on student performance or the evaluation of the clothing product produced by the student before the learning process using the learning video with the product assessment after the learning process using the learning video of sewing fashion technique.

Based on the data obtained, student learning outcomes before using the technique of sewing clothing video obtained classical completeness of 77.86%. From the result of student learning after using video of fashion sewing technique obtained classical mastery of 95,24%. To see the effectiveness of learning video sewing technique developed fashion, then the calculation of improving student learning outcomes on pretest and posttest by using gain score. After the calculation, obtained value of the score of 0.32 large scores of large from 0.30 in the medium category. So it can be concluded that the learning video sewing technique is an effective learning video used on the subject of dress code one of the material on the process of sewing blouses.

The effectiveness refers to the extent that experience and development outcomes are consistent with the objectives referred to by Akker1999 in Neliyarti (2016: 98). Thus it can be interpreted that a product can be said to be effective if the product is able to achieve the expected goals. Based on the results of tests conducted and referred to the opinion it can be concluded that the learning video sewing technique fashion is effective for learning sewing clothes.

4. Disseminate Stage

This stage of dissemination aims to get inputs, corrections, suggestions, judgments, to refine the end result of the Development of Fashion Learning Tailoring Techniques on Fashion Subjects in Madrasah Aliyah to be readily adopted by users of learning videos. The learning video of this fashion sewing technique is disseminated to other locals, that is in grade XII students who studied

Dress in MAN 1 Bukittinggi. Data obtained from the observations made by the observer is the student activity during the learning process gets the average percentage of 86.51%. It is included in the active category and successfully improves student learning activities from various aspects of the assessment. Furthermore, learning video sewing technique fashion is distributed to other schools that study the dress code that is in New Koto Padang Panjang MAN. This deployment stage is conducted with the aim to know the implementation of the use of learning videos on the New Koto Man Padang Panjang. From the observations made, it is known that student activity of MAN Koto Baru Padang Panjang during the learning process gets an average percentage of 86.90%. It is included in the active category and successfully improves student learning activities from various aspects of the assessment.

Besides through learning activities, the implementation of learning video usage in MAN Koto Baru Padang Panjang at the deployment stage is also seen from the practicality of learning video sewing technique technique according to the response of MAN Koto Baru Padang Panjang students. The practicality of learning video sewing technique technique is also seen from the questionnaire to see the response students of MAN Koto Baru Padang Panjang. This data is obtained after learning using video learning. Practicality of learning technique video of sewing fashion by students is very high with 89,09% value. These results indicate that the learning video sewing technique technique is "very practical" and can facilitate teachers in the implementation of the learning process and assist teachers in implementing the concept of learning materials Tata Clothing especially on the material process of sewing blouses.

The role of learning video is needed for the realization of learning achievement of this dress. Video learning in question is a video that supports and facilitate the delivery of teaching materials so that the concepts in sewing easy and understandable by students. The fashion learning video sewing technique is one of the right solutions to be applied because it is able to describe abstract material with animation and video, the time spent is relatively short compared to describing it manually, and the learning process can be done repeatedly outside the classroom.

4. CONCLUSIONS, IMPLICATIONS AND ADVICE

1. Conclusion

Based on the results of research development of learning techniques of sewing fashion that has been done, then obtained the following conclusions:

- a) Products video learning techniques sewing clothes produced in the form (file, image, video, sound) for the subjects Dress on Basic Competence Sewing Blouse.
- b) This development research produces a valid, practical and effective sewing technique learning video, on the subjects of Dress Fashion on Basic Competition of Tailoring Blouse. The learning video sewing technique developed is based on the syllabus on the subject of dress code.
- c) Sewing technique learning video on the subject of dressing has been tested and valid is 0.92 for mediation validation and 0.93 for material validation, the practice of learning technique video of this fashion sewing is 100% and 89,09% stated that learning technique video sewing fashion is in the category

of very practical and effective use as a learning video on the subject of Fashion Clothing.

- d) The use of learning videos of fashion sewing techniques can improve student learning outcomes by looking at differences in student learning outcomes before using learning videos and student learning outcomes after using instructional videos, student learning outcomes after using higher learning videos compared to student learning outcomes before using learning video sewing technique.

2. Implications

Research conducted has resulted in a product of learning video fashion sewing techniques for subjects Tata Clothing. This research can provide input to education providers. The learning videos developed have implications for the users of the product ie for students, teachers and schools or other practitioners. Teaching videos consist of teachers, where the learning video becomes an option as the right media in the learning process to facilitate the teacher in delivering the lesson material by visualizing step by step step in making clothing so that learning is more effective, innovative and interesting. The learning videos also have implications for the students, these learning videos have direct implications for productivity with higher product assessment results, they understand sewing techniques more precisely, manifest and expand the learning experience so that they have the knowledge and skills used in the future, own clothing or for commercial purposes.

Video learning also has implications for the school, namely in the provision of facilities and infrastructure that support the use of video learning, not only for productive subjects but also for other subjects. Furthermore, learning videos also have implications on the Ministry of Religious Affairs of the Regency and City / District Education Office and City that is in facilitating teachers in schools in conducting training in order to develop learning tools, especially training in the field of computers. In addition, learning videos also have implications for learning group practitioners or course places, in the provision of facilities and infrastructure that support the use of instructional videos of course participants so that they can easily understand the course materials and can practice themselves at home with a variety of textile materials.

3. Suggestions

Based on the research conducted, it is suggested things as follows:

- a) It is expected that the subject of Fashion Dressmakers in Madrasah Aliyah can help improve students' learning outcomes, one of them by using a fashionable, practical, and effective fashion sewing learning video in the learning of dress code especially on Basic Competition of Tailoring Blouse.
- b) It is expected that students can use the learning video sewing technique techniques as a means for independent learning in the room Tata Clothing.
- c) It is hoped that the Madrasah Aliyah School of Justice facilitates the use of learning tools that teachers need.
- d) It is expected that the Ministry of Religious Affairs of the District and City / District Education Office can provide facilities for teachers to conduct information and communication technology training by attending various

trainings, seminars, workshops, in order to develop learning tools and to create learning videos well.

- e) It is hoped that other researchers will conduct similar development on learning materials, both on the subject of Clothing and other lessons.

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