Development of Audio Visual Media Based Learning Model in 11th Class Ambon City Public High School

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Abstract: This study aims to improve historical learning through the development of audio-visual media-based historical learning models. Through the use of information technology in learning, this research is intended to increase historical awareness, bring students thinking creativity in solving problems, and foster students' interest in learning in accordance with the environmental conditions in which students are located. The formulation of the problem in this study are: (1) can the development of audio visual media-based historical learning models improve the quality of history education learning in Ambon State High School? (2) can the development of audio visual media-based historical learning models improve the historical education competency? The method used in this study is the type of research and development or what is called Research and Development following the development research model of Dick & Carey (1). The results of this study are as follows (1) the development of an audio visual media based history learning model can improve the quality of historical learning in Ambon State High School. Improving the quality of learning history related to events: diachronic, has three dimensions of time and sees the causal relationship of an event, analyzes the birth process, develops, reaches the top, moves down, even dies or ends, (2) the development of audio visual media-based historical learning models can improve the mastery of history lesson competencies of class 11th students of Ambon State High School, which is shown by student learning outcomes as measured by competency tests. This means that there is an increase in the mastery of students' competencies after following history learning using the development of audio-visual media-based models. Based on the results of these studies, it can be concluded that the development of historical audio visual media-based learning models is very useful for teachers in Ambon State High School to describe various events related to historical learning, and also needed by students to improve mastery of competencies from historical learning.

Keywords: audio visual media, competencies, development model, history learning

I. INTRODUCTION

Education is a conscious effort undertaken to prepare the generation of the nation to actively develop their potential through learning, guidance, and training in order to play a role in the future. Recognizing the importance of education in preparing this generation of generations, the element of education rooted in national cultural aspirations, elements of culture, life and national development which are important factors between the education process and the formation of human qualities cannot be separated, because education is an absolute requirement in determining the success and progress of the nation. In connection with that, the existence of education cannot be separated from the efforts of educators in channeling knowledge and values that apply in society to students, as well as historical education.

Historical education is then used as the most important element in national education, because there is a belief that historical education is able to develop attitudes and character and understand how the history of the nation is formed and developed. Understanding is what makes some countries always place historical education as one of the most important elements in their national education.

On the other hand in Indonesia the role of historical education is questionable, along with the occurrence of curriculum changes that influence the organization of material provisions, assessment of learning outcomes as well as historical learning models that are still questionable because they are classical and continue to emerge, so that various curriculum implementation problems are suspected of having a response teachers for rapid curriculum changes, and learning designs that do not consider important factors from the students' point of view, including the level of understanding of psychological, cultural, and environmental factors, so that these factors make learning not effective and weaken students' understanding of historical learning which then causes problems others are dislike or attitude of rejection which results in low student learning interest in historical learning. Responding to various problems that occur, it is necessary to develop historical education models such as the use of audio-visual learning media that are able to attract students' interest and motivation but also benefit the teacher in developing historical learning materials.

II. DEVELOPMENT OF HISTORICAL MODEL LEARNING

The development process is an aspect of technology that tries to explain the differences between the strengths obtained from knowledge and its implementation with the help of examples of education every day (2). The conceptual description of model development consists of several theories, these theories have strengths and weaknesses, in general learning design models are classified into class-oriented models, system-oriented models, product-oriented models, procedural models and circular models.
A model usually describes the whole concept that is interrelated. In other words the model can also be seen as an effort and to concretize a theory as well as an analogy and representation of the variables contained in the theory (3). Whereas according to (4), “A model is an abstraction of reality; a simplified representation of some real-world phenomenon”. By definition, the model is a representation of several phenomena that exist in the real world.

Class-oriented models are usually intended to design learning micro-level that only takes two hours or more of lessons based on humanistic theory. Another case with product-oriented models is the learning design model to produce a product, in the form of learning media, for example learning videos, multimedia and modules based on constructivist theory, while the model has a system of learning design models to produce a learning system with a broad scope.

In addition, the term development refers to growth, evolution and change that is carried out slowly. According to Jan & Geraldine as, development is a systematic effort to produce or collect various theoretical statements (5). A theoretical statement is a formal expression of the relationship between at least two or more important variables. Theoretical statements in learning technology generally have a kind of demand that is considered relevant in learning technology or learning design.

Based on an understanding of the development of the model described above, the development of the model in this study relates to the field of learning and development technology which is one of the domains of the field of learning technology, where Audiovisual technologies are ways to produce or deliver materials by using mechanical or electronic machines to present auditory and visual messages (6). In other words, development shows the existence of a change based on theories that are in accordance with the expected goals and related to learning. While the model developed in this study is a model of developing historical learning for high school students of class 11th in Ambon. This development was carried out to increase learning motivation and the results of students' historical learning competencies, in which the historical subjects were subjects aimed at developing student behavior and historic awareness.

### III. AUDIO VISUAL MEDIA LEARNING

Media is a physical tool material used to implement learning and facilitate student achievement on learning goals. Learning media include materials such as blackboards, handbooks, slides, OHP / OHT, real objects, and video or film recordings. In addition, there are also materials and some up-to-date media such as computers, DVDs, CD-Roms, internet, and the use of interactive video conferencing facilities (7).

Audio visual media is a way of delivering teaching materials using mechanical and electronic equipment. The media is known easily because it uses hardware in learning. Audio visual equipment allows projecting live images, playback of sound, and displaying large visuals. Audio visuals are linear in nature and usually give expository presentations rather than interactively. If the audio visual media can be accessed, it will display the characteristics of computer technology and integrated, can be accessed and controlled by students.

In particular audio visual media tends to have the following characteristics (8).

1. Linear
2. Dynamic visual displays
3. Typically used in a way previously determined by the developer
4. Tend to be a form of physical representation of real and abstract ideas
5. Developed based on the principles of behavioral and cognitive psychology
6. Often centered on the teacher so that less attention to student learning interactivity.

According to Prastowo, the audio visual media structure includes six components, namely: title, learning instructions, basic competencies or subject matter, supporting information, training and assessment. Steps to compile audio-visual teaching materials, whether or not the audio-visual instinct program depends on the initial design, starts curriculum analysis, determines the media, schemes that show scenarios from a video program, script, taking pictures and editing processes (9).

Some considerations in producing audio visual material when composing a moving image:

1. Audio visual materials are designed, especially to pay attention to motion
2. Cultivated correctly, moving images are very good for effective purposes (able to influence students to change attitudes)
3. Moving images that are used are based on dealing directly with the students’ personal, the text should pay attention to students as individuals
4. Sound accompanying according to the picture
5. Narratives must not tell what is seen on the screen, except to implement, clarify pressing the important thing
6. All moving images contain contents that have been standardized, and must be shot or tested before being used in learning activities. Before printing, consult the material with people who are experts in the field and tested
7. Visual scripts are carefully designed, script writers think individually (thinking in terms of images rather than sentences)
8. Manuscript planning must take into account the attitudes of students, background, culture, age, gender, and their ideas and expectations
9. The images presented are varied, taken from different taking angles, so that students are not bored, for a long period of rotations to a minimum
10. Involving many experts from various disciplines, the responsibilities of work arrangements exist at various levels of production. The final decision is on development.

The steps taken to compile an audio visual program are as follows: first, the title is derived from basic competencies or subject matter in accordance with a lot of material. Second, making a synopsis that describes briefly and clearly about the material to be discussed in an audio visual program.
Third, supporting information is clearly described, solid and interesting in the form of a story board or script. We can use various learning resources to enrich material such as books, magazines, videos, internet or research journals. A story board is generally written in two columns, in the first column containing an image that is completed with shooting commands, while the second column is a narrative that explains the image. The clarity of a story board will make it easier to produce a video program. Fourth, shooting is done on the basis of the story board. So that the results are maximum and good, it should be done by people who master the image recording tool. Fifth, the process is editing carried out by people who know that editing tools are accompanied by people who know the substance or content of the video material. Sixth, in order for the results to be satisfactory, before being duplicated it is better to do an overall assessment of the program, both substance, education and cinematography. Seventh, video programs are usually not interactive, but tasks that can be given at the end of the show through the presenter. Tasks can be written on other sheets, for example in the form of practice assignments. Tasks are given individually or in groups. Eighth, assessments can be made on written answers from the video program statement or the results of the work provided (10).

The preparation or production of audio visual learning media must pay attention to several aspects. Pictures and movements are not the only ones that must be considered. According to Palma that: "Oral narratives, drawings and comments, pictures, different representation varieties such as marionettes, shade theater, puppet shows, and so on, are the resources of great audiovisual education from other perspectives" (11).

According to the limitations faced with the use of audio visual media. "The quality of the videos, by themselves, led most academics to rely on professional support and equipment or refrain from using the medium" (12). The opinion explains that the audio visual model design becomes limited if the user or user in this case the teacher cannot apply in learning. It must be mentioned that there is a lack of knowledge of teachers and students about how to conceptualize and produce good quality videos. This then makes most academics rely on professional support and equipment or refrain from using the media.

IV. METHOD OF DEVELOPING AUDIO VISUAL LEARNING MODEL

Basic research methods (basic research) used in this study, including in the type of research and development or known Research and Development (R & D). Development research is a type of research that is focused on the process of producing learning products. This research is presented in the form of qualitative data, and procedurally according to the steps or stages of development and also reports from the evaluation results. Whereas in product testing using the experimental method, after the product has been tested it will be applied (13).

Generally this research in the field of education is based on the results of needs analysis as a basis for finding solutions, both qualitative, quantitatively, experimentally and so on. For product-oriented development research that is solving learning problems by designing products as solutions. As for analysis, it is usually done by various methods with the aim of measuring and verifying. So the approach in this study follows the steps or procedures of development research according to the models that have been designed based on existing models before, so only the relevance or suitability of the model needs to be done with the problem solving.

V. RESULT AND FINDINGS

A. Preliminary Research Results

Results of this research and development as previously explained that aim to improve the history of learning outcomes of students and improve professional teachers especially history teachers in utilizing audio-visual based learning media, then based on preliminary research conducted, the learning process is fulfilled by several factors, both externally and internally in this case include teachers, material, patterns of interaction, media and technology, situations and learning systems.

In connection with that, it is very necessary knowledge and diversity of skills so that students are able to empower themselves to find, interpret, assess and use information, and produce creative ideas to determine attitudes in decision making.

The results of the analysis of historical learning that have occurred in schools especially in the city of Ambon, which are felt dry and boring because they are still struggling with the approach chronicle and tend to require students to memorize an event, showing that it ultimately makes students not accustomed to interpreting an event to understand the dynamics of a change. This of course relates to learning media factors that do not support or not even attract the attention of students in the teaching and learning process. The learning model factors and the support of relevant learning media is what is needed by the teacher in motivating students to learn while increasing the results of student learning competencies.

In line with that, the efforts taken to improve students' response and interest in history lessons are to create historical learning patterns related to their environmental situation. In addition, historical learning activities require media to develop a sense of caring and interest in the realm of regionalism.

The results of this development research are changing teacher learning methods, which have been occurring so far, where the learning process of history is done by the teacher without using learning media. So this research is more oriented to the development of historical learning media based learning models, because the principle is the heart of education is the learning process or the interaction of teachers and students through the medium of learning media.

Based on this, the development of learning media that follows a pre-existing development model can be combined with several other development models, so that the development of the model can be adapted to the conditions.
of the school as the sample of this study, Ambon 11 SMA located in Ambon city. The development of historical learning media is more important not only to the teacher, but students can also enjoy it to improve the results of their learning competencies. For history tea-based history learning media product. Chers, historical learning material for 11th grade students in high school semester one is odd, will use media in the form of historical learning slides designed according to the needs of teachers and students. The contents of the slide are in the form of options for text effects, animations, visual, audio and video. The programs or applications used are Microsoft Office PowerPoint, with the main reason for using the application because it is very easy to make, editing, and also easy to operate, and does not require many additional applications or support when running it.

The development of a learning model in the form of slide products as a teacher and student communicative media was then adjusted to the steps of developing a product-oriented model. Whereas to produce a product that is feasible to use, it is necessary to validate the audio visual.

B. Feasibility of Audio Visual Media Based Learning Products

The feasibility of testing the history of learning media for high school students of class 11th in semester 1 especially specialization classes is determined based on the results of validation by material experts, media expert validation, and language experts, test results, as well as teacher responses and students. This development research refers to the development model and Borg & Gall, which are limited to several stages. These stages include: a) information collection stage; b) planning stage; c) product development stage; and d) the stages of validation and testing (14).

The feasibility of product development models based on the results of evaluations from experts, which in stages, uses an instrument in the form of an assessment questionnaire on data attractiveness, and ease of use of the product. Instruments at this stage were used in the form of response questionnaires. Questionnaire responses to product use have four answer choices according to the content of the question, for example “Very interesting”, “Interesting”, “Less Interesting”, and Not Interesting”. Each answer choice has a score of 33 different which defines the level of suitability of the product for the user. The total instrument assessment is done from the total score obtained then divided by the total score then the result is multiplied by the number of answer choices.

Experiments of this study were experimentally carried out in several schools including SMA Negeri 13 Ambon, SMA 1 Ambon and SMA 3 Ambon. The development of this model is oriented on products that will later be used by teachers, especially history subject teachers with the aim of improving teacher professionalism and students’ historical learning outcomes.

The results of the research on the development of historical learning produced historical learning slides, especially the material in the first semester of class 11th (student class). Historical learning slide products use the application Windows, later used by high school history teachers and this research was carried out in 11 SMA Negeri Ambon. Presentation-based applications Microsoft have a variety of interesting features, supporting the creation, editing, design, and publication of slide presentations with a variety of interesting features, ease of operation, export import presentations, downloadable templates can be found, interesting from the visual aesthetic side, but also able to create interactive presentations. Its function is for directed and well-controlled learning because the imaginary bias of students without media will occur. In addition, it raises students' interest in learning history.

The learning model and product development will motivate, increase the curiosity of the history teacher, because the teacher directly practices several learning methods in learning history. The condition of learning history previously used the lecture method to convey material by telling historical events to students. Students pay attention to and hear the explanation or exposure of the teacher, while the characteristic of historical learning combines learning activities in which studying past events are closely related to the present, analyzing facts in history but still paying attention to educational goals in general.

C. Development of Audio Visual Media Program Learning History

The purpose of the program trial is to obtain feedback in the context of program revision /development. The response to the program obtained from the parties involved in the pilot activities is generally positive. Even so, based on observations and suggestions for improvements obtained, revisions to the program are deemed necessary. Suggestions that were netted during the trial were not automatically accepted. A suggestion is sometimes contradictory to other suggestions or contrary to the opinion of the majority of parties involved in the trial or sometimes without being accompanied by clear reasons. Can also be a suggestion if received, will cause new problems. Suggestions and comments received during the trial program are related to the following aspects:

1. Audio Visual Interactive Program
   a. Suggestions for not too fast viewing. Actually, the appearance of a display on the monitor is slowly, depending on the facilitator or the operator who runs the computer, meaning that if you want a longer time, of course you can. But what needs to be considered is that screen switching is done after the description (text) is displayed.
   b. The sound in the program feels unclear, this depends on the electronic equipment facilities used and especially on the devices loudspeaker and amplifier. But that is still a special concern to increase the volume gain. Only normal so it's the problem that the recording equipment used is not good, if the gain is raised the sound becomes broken or rumble.
   c. Audio recordings that accompany video recordings are not clear. There are several things that cause this, among others: 1) the camera microphone does not function properly; 2) the microphone is far from the sound source; 3) the source of the original sound is indeed small. However,
this is a special consideration in the subsequent shooting taking into account equipment and recording techniques such as external microphones which can bring the microphone closer to the sound source.

2. Learning Materials
   a. The History Learning competency formula mentioned at the beginning of the program is very narrow.
   b. Automatically the development of competencies will be followed by the development of material.
   c. The material presented still needs to be supplemented to achieve the specified competencies, especially those concerning the development of media tools, understanding and terminology in history.

The addition of learning and material competencies will have an impact on overall program changes. Will affect the script, storyboard, narration and need to add stock of images, audio and video, and so on.

D. Findings

Research and development could eventually be used as a significant contribution in the development of audio-visual Teaching History on the subjects of history held in class 11th grade SMA Negeri 11 Ambon. Here the teacher is able to condition learning in accordance with the criteria for developing audio visual history learning, taking into account learning objectives, competencies to be achieved, readability of material, practice questions, competency tests.

The results of the research and development of History learning audio visuals on history lessons are the first steps in developing meaningful learning models. Audio visual history learning in history lessons at SMA 11 Ambon can be socialized and developed for other lessons that have a team of subject teachers, and consider the basic competencies according to their learning.

VI. CONCLUSION

Based on the results obtained in the research and development of historical audio visual media-based learning models in Ambon 11 Senior High School, it can be concluded that:

First. Audio visual media on historical subjects can improve the mastery of history lesson competencies of class XI students of SMA 11 Ambon. This is indicated by student learning outcomes as measured by competency tests. This means that there is an increase in mastery of students' competencies after taking history learning using Audio visual media. This is based on the average grade or combined students who show the results of the average student more than 80 (the results of the minimum completeness value). In addition, students are motivated to learn because the media used is interesting so that students' attention during teaching and learning activities is very focused.

Second. Based on the results of the analysis stating that the average value of students is equal to or more than 80, would like to explain that there is a significant influence in using audio visual media in history lessons. This shows that the model developed is very effective and efficient in the current technological era, and this is very influential in improving student attitudes and also in improving student learning outcomes.

Work, implementation of the development model of the teaching of history-based audio-visual media is very beneficial to the process of teaching teachers, and very effectively and efficiently used because of creating, editing until the learning process takes place, it clearly can be used well by teachers so that through the medium of learning audio visual, history learning can attract students' attention during the process of learning activities take place and this can be seen from the results of learning outcomes tests and questionnaires on student attitudes towards the use of audio-visual media during history learning takes place.

VII. ACKNOWLEDGMENT

This research work is supported by Department of Educational Technology State University of Jakarta and Pattimura University.

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