The Development of Learning Media Using Sparkol Videoscribe Software on Natural Science Education Subjects

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Abstract-*This study is aimed at: (1) developing learning media by using sparkol videoscribe; (2) knowing the use of learning media develop by using sparkol videoscribe software in increasing the students' learning interest at natural science education subjects. This research method used research and development (R&D) with the ADDIE model. The steps of this study include: analysis, design, development, implementation, and evaluation.Based on the results of the use learning media using sparkol videoscribe software in natural science education, the value of students' interest in learning was obtained before using the learning media at 57.4 and after using the learning media at 63.6. In addition to using interest questionnaires, researchers also observed during the learning process. Based on observations made by researchers, when learning using sparkol videoscribe software students pay attention to the ongoing learning process because they feel interested in the content presented through learning videos with variations in images, colors, text, and sounds instruments. The students are also more enthusiastic in paying attention to the ongoing learning process and participating in the learning process such as asking questions and giving feedback when the teacher explains the materials. Based on the description of the results of the study, it can be concluded that the learning media using sparkol videoscribe software in natural science education subjects can increase students' interest in the learning process.*

Keywords: Learning Media-Video, Sparkol Videoscribe Software, Learning Interest.

I. INTRODUCTION

Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have a good personality, self-control, intelligence, character-based local-wisdom, and skills needed by themselves which appropriate in society, nation, and country. In essence of education is a process of humanizing humans. Therefore, everything that is in the practice of education should always pay attention to the nature of humans according to Article 31 Paragraph 1 of the 1945 Constitution States that "Every citizen has the right to education." This is in accordance with Act No. 20 of 2003 Chapter V of Article 1 Concerning the National Education System stating that "Every citizen has the same rights to get a quality education."

To achieve a quality of education, the improving quality of education must be done at every level and education unit is a very important business. This effort can be seen from the renewal of the curriculum 2013, the quality of the teaching staff, the availability of complete learning resources, and infrastructure that supports the effective and efficient learning process.

Teachers are people who are very instrumental in advancing education. The position of the teacher as an educator is a professional position. For this reason, the professionalism of teachers is demanded to continue developing learning resources in accordance with modern of science and technology, as well as the need for qualified and capable teacher resources to be able to compete in regional, national and international forums. Teachers also play an important role in choosing appropriate learning media. By considering the characteristics of children who pay more attention to something that attracts their attention, arouses interest, and motivates learning to trains children's imagination.

Media is physical advice that contains messages or means to convey messages of lessons. According to the concept of education or learning technology, media must include learning resources. This is in accordance with the theory by Kemp and Dyton quoted by Aristo Rahardi, which states that: "The benefits of media in learning are delivery of multi-form learning materials, learning becomes clearer and more interesting, more interactive learning, time and energy more efficiency and effectiveness, improving the quality of student learning outcomes, and also media can be done anywhere and anytime." Media of learning

can material presented alongside learning process and change the teacher's role in a more positive and productive direction.

The use of learning media helps students to be able to learn independently and helps teachers not to always teach using conventional methods. The use of learning media is not an additional function but has its own function as a means of helping to realize a more effective and efficient learning situation. In addition, learning with media also attracts students' attention so that children are more motivated and passionate about learning.

In this modern era, it is very appropriate if the learning process is provided with learning media that are in line with technological advances (Science and Technology) because basically the current generation is a generation that cannot be separated from technological developments. Marc Prensky, an education expert divides humans into two generations, namely the digital immigrant and digital native generation. A digital immigrant is a picture of someone who during childhood to adolescence took place before the development of computers and the internet things. While digital native is a picture of someone who during childhood to adolescence has since influenced by developed technology such as computers, internet things, animation, and so on. Students today are classified as the generation of digital natives, therefore the rightful learning media for today's children is digital-based learning media.

Sparkol videoscribe is a learning media consisting of a series of images arranged into a video. With unique characteristics, sparkol videoscribe is able to present content that combines sound, image, writing, color, animation, attractive design as to arouse the enthusiasm and interest of students learning. The features that have been provided by this software are so diverse that they are able to become learning media tailored to the characteristics of children and learning objectives. In addition to using the design that has been provided by the software, users can create animation designs, graphics, and images that are in accordance with the needs of learning and then imported them into the software. In addition, users can also dub-sound as needed for making videos of learning. Making with sparkol videoscribe can also be done while offline so it does not depend on internet services. Users only need to download the software and install it on their computers.

Based on preliminary research on the use of learning media in the process of learning natural science education subject in SDN Kebun Bunga 5 Banjarmasin, it was seen only using whiteboard media and textbooks. Even though the school facilities are supported by digital natives era, such as computers and LCDs projectors availability. Teachers assume that using interactive learning multimedia is very complicated. The submission of the subject matter still used to lecture method. Students only listen to the explanation from the teacher, but when the teacher gives feedback in the form of questions the students cannot answer that correctly. When the teacher explains the subject matter, it appears that the students are not paying attention to the explanation from the teacher.

Based on these problems, the researchers were interested in conducting research and development of learning media with the title "Development of Learning Media Using Sparkol VideoScribe to Increase the Student's Interest in Learning Natural Science Education in 4th Students Grade at SDN Kebun Bunga 5 Banjarmasin". The selection of sparkol videoscribe using learning media is felt to make the learning process more enjoyable. To generate interest and attention to the lesson in a directed manner, the stimulation is needed. By developing attention centrally, it can generate interest in learning for all aspects. The emergence of interest and the development of the desire to master certain skills from the results of the learning process is certainly a motive or reason that is strong enough to motivate students to follow the learning process.

The application of sparkol videoscribe using learning media is expected to be able to attract the attention and interest of students so that it helps facilitate the understanding of concepts on the subject matter of "Care for Sentient Beings" in 4th Students Grade at SDN Kebun Bunga 5 Banjarmasin.

II. METHOD

This research uses research and development (R&D) methods. Research and development (R&D) were chosen because this research method used to produce certain products and test the results of these products. This method is considered appropriate to be used in this study because this study aims to produce learning media using sparkol videoscribe which is used to increase student learning interest.

The design and development that is the reference in this study using the ADDIE model. ADDIE Model stands for Analysis, Design, Development, Implementation, Evaluation. The reason the researchers used this development model was that the ADDIE model had work procedures that referred to the Research and Development (R&D) stage were more systematic and simple so they could produce more effective products. The stages of developing the ADDIE model as follow:

1. The analysis is an identifying process that will be studied by students, namely conducting a needs analysis, identifying problems, and performing task analysis. In this study, the analysis step is the data collection stage related to the problems that exist in a learning process which are then identified how to solve the problem through the needs of analysis that are accordance with the problems found. The problem found in this study is the low interest in the student learning process and how to manage it by developing learning media using sparkol videoscribe.
2. Design is the stage of making a media display design that will be developed. In this study design are a flowchart, storyboard, and media manuscript. Media design is tailored to the characteristics of students.
3. Development is the stage of making media in accordance with the design of media that is in the design stage. In this research, the development stage is the production stage. In addition, at this stage, the media was revised by media experts and material experts to get improvements, after which validity was validated for use in the learning process.
4. Implementation is a real step to carried out media design and development to the learning process. In accordance with the target, this product will be implemented to student 4th grade at SDN Kebun Bunga 5 Banjarmasin.
5. Evaluation is the stage to evaluate the product being developed. In this study the evaluation process was carried out by clarifying the changes in student interest ongoing learning, this was done because this study focused on increasing students' interest in learning.

In this study, the population was 4th-grade students at SDN Kebun Bunga 5 Banjarmasin. While the samples taken were only 1 class that had a fairly low interest in learning. The sampling technique used in this study is Purposive Sampling which means the determination of samples with certain considerations between researcher and teacher.

Data collection techniques in this research are observation, questionnaire, and documentation. The questionnaire is used to determine students' learning interest in natural science learning before and after participating in the learning process using sparkol videoscribe as learning media. Observation is used to observe students' learning interest in the learning process before and after using sparkol videoscribe as learning media. The documentation in this study is various documents needed to support data processing such as photographs, student data, lesson plan, and learning resource books.

III. RESULTS AND DISCUSSION

This research was conducted on natural science subjects through the ADDIE Research and Development model consisting of 5 stages: Analysis, Design, Development, Implementation, and Evaluation. The researcher will describe the results design and development of learning media according to the ADDIE stages as follow:

1. The analysis is the initial stage of preparing a media program in the learning process, because in this stage the problem is examined so that solutions are found, and the solutions are solved. Based on the results of observations made by researchers at SDN Kebun Bunga 5 Banjarmasin, there are several important things about the learning process: First, the interest in learning possessed by students is quite low. This is shown through questionnaires and observations in the classroom, where students claim to be bored and sleepy while listening to the teacher lecturing method who deliver the subject matter. Another thing that causes low interest in student learning is the teacher teaches with a voice that is not loud enough so that students who sit at the back are difficult to understand what the teacher says and explained and then writing on the whiteboard is difficult to read. Natural science education learning according to students is quite boring, because the students are required to record a lot of material and teachers only rely on textbooks without providing other learning media alternatives. Secondly, based on observations at SDN Kebun Bunga 5 Banjarmasin, the facilities and infrastructure are available at the school very sufficient, one of which is the availability of computers and LCDs Projector and very unfortunate if it is not used properly. Teachers who are in the school capable to operate computers and LCDs to be used during the learning process as effective learning aids. Based on some of the descriptions above, the researchers developed learning media using sparkol videocribe in hope of being able to increase student learning interest. Sparkol Videoscribe was chosen because it can present learning content that combines interesting images, sounds, and graphic motion so that students are able to enjoy the learning process.
2. Design is the preparation stage for making learning media by creating media manuscripts. Media manuscripts are guidelines for making learning media using sparkol videoscribe. Media manuscripts consist of a description of the scene, visibility of media, audio/back sound, graphic motion/information, and narration.
3. At the stage of development is the stage of media production where the making of media is adjusted to the text that has been formulated before. At this stage also the media has been examined and validated by media experts and material experts so that it can be used in learning. The production process of learning

videos using sparkol videocribe consists of three stages, namely the pre-production stage, the production stage, and the post-production stage. The pre-production stage begins with preparing all the tools needed when making learning media, both software and hardware. The hardware consists of computers tools, while software used sparkol videocribe, besides supporting by media experts and material experts is also provided so that media can be packaged according to needs of learning. The last stage of this development is post-production, which at this stage is reviewing and evaluating the media that has been produced. The main activity in this post-production stage is to validate learning media using sparkol videocribe. The validator consists of a media expert and a material expert. Based on the questionnaire given by the researcher to the validator, the learning media can be used for research with a slight revision. The media expert in this study was Mr. Agus Hadi Utama, M.Pd as a lecturer in the Education Technology Study Program FKIP ULM. Thus, learning media using sparkol videoscribe are shown and tried by media experts then validated as the table below:

Table 1. Validation result by media experts

No.	Aspek Yang Dinilai	Nilai Ahli	Nilai Maksimal	Presentase	Ket.
1.	Mutu Teknis	20	25	80%	Baik
2.	Aspek media	33	40	82,5%	Baik

Based on the results of the media expert validation, the results showed 80% technical quality assessment were included in the good category, and the media aspect value was 82.5% which was in the good category too. The data shows that the learning media using sparkol videoscribe in the subject matter of "Care for Sentient Beings" in 4th students grade at SDN Kebun Bunga 5 Banjarmasin is included in both categories of technical quality and aspects of the media itself. The material experts in this study were Ms. Alfisyahrin, S. Pd as the chief class of 4th-grade students at SDN Kebun Bunga 5 Banjarmasin. The learning media using sparkol videoscribe were shown and tried by material experts then validated. The following are the results of the validation by the material expert:

Table 2. Validation result by instructional material experts

No.	Aspek Yang Dinilai	Nilai Ahli	Nilai Maksimal	Presentase	Ket.
1.	Aspek Media	30	30	100%	Sangat Baik
2.	Kesesuaian Materi	20	20	100%	Sangat Baik

Based on the results of the material expert validation, the results showed 100% media aspect assessment and 100% material suitability were obtained. The data shows that the learning media using sparkol videoscribe in science subjects matter of "Care for Sentient Beings" in very good categories both of media aspects and material suitability.

The implementation phase is the stage where the media that has been produced is used during the learning process. Sparkol videoscribe are used in science subjects matter of "Care for Sentient Beings" in 4th students grade at SDN Kebun Bunga 5 Banjarmasin. The media is used for 2 days, Wednesday and Thursday 18 and 19 April 2018. The first meeting, the teacher does not use learning media using sparkol videoscribe as a media in the learning process, teachers use textbooks and whiteboard in explaining science subject "Care for Sentient Beings". The second meeting of the teachers used learning media using sparkol videoscribe as a media in explaining the science subject "Care for Sentient Beings.

The last step in this development is to evaluate the media that has been implemented. Evaluating what is intended in this case is clarifying the use of media in increasing students' learning interest in material science subjects concerned "Care for Sentient Beings". Measurements of increasing interest in learning are done by giving questionnaires to students, where the questionnaire is given 2 times treatment, that is, before using the media and after using the media (pre-test and post-test). Interest questionnaires were given to 29 students of 4th-grade students at SDN Kebun Bunga 5 Banjarmasin. Questionnaire of interest given to students to find out the interests that students have before and have after using learning media sparkol videoscribe.

Based on the results of the research conducted, the researchers found the interest in learning possessed by 4th-grade students in SDN Kebun Bunga 5 Banjarmasin was quite low so that the learning

objectives could not be achieved, therefore the researchers decided to develop learning media that could increase students' learning interest. Because interesting learning media are considered capable of making students more enthusiastic about learning. This is in accordance with the theory by Ibrahim et al. "That learning media is everything that is used to channel messages (learning material) so that it can stimulate the attention, interests, thoughts, and feelings of students in learning activities to achieve certain learning goals."

The media chosen in developing this learning media is sparkol videoscribe because that media can present content that attracts students which suitable for learning. Sparkol videoscribe is a visual media that able to presented learning materials with the support of image, graphic motion, sounds, and animation. This learning content can attract students' attention and also can be adjusted to the learning objectives. This is in accordance with the functions of the media proposed by Hamalik, the use of learning media in the learning and teaching process can generate new desires and interests, generate motivation, and stimulate learning activities, and even bring psychological influences to students.

The production of learning media using sparkol videoscribe starts from preparing a laptop, mouse, and installed software sparkol videoscribe. After that, the media is made according to a predetermined design, which is in accordance with the media manuscript. Finally, the media is examined by media experts and material experts to ensure that the media is suitable for use in the learning process. the production process of learning media using sparkol videoscribe in this study is in accordance with the stages of media production proposed by Ibrahim, et al (2000), namely the pre-production stage, the production stage, and the post-production stage.

The Development of learning media using sparkol videoscribe packed with content that can provide readability for students. Text selection, type, and font size are adjusted so that students are able to read it clearly. Color, image, and motion packaging in sparkol videoscribe media that can attract students' attention to the ongoing learning process. Back sound also used to increase students' enthusiasm for learning. The content presented in learning media is in accordance with the material concerned and lesson plan with natural science subject "Care for Sentient Beings". Sparkol videoscribe is also easy to use in a variety of lessons natural education subject.

IV. CONCLUSION

The design and development of learning media using sparkol videoscribe can increasing students' learning interest in natural science education subjects. The use of appropriate learning media is adjusted to the conditions and characteristics of students, fields of study, and learning objectives that have been set in accordance with the lesson plan. Based on the results of the study, the percentage of student interest in learning has increased.

V. ACKNOWLEDGMENT

Although the design and development of learning media using sparkol videoscribe are able to increase the learning interest of 4th Grade students at SDN Kebun Bunga 5 Banjarmasin, it does not mean that the results of this study can be reused in other classes or subjects. Research and Development of learning media should be designed according to the needs and characteristics of students in specific schools. The teacher as a facilitator should make a study of various types of learning media in order to be able to develop and create a more creative and innovative learning atmosphere.

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