# **Initial Development of Instructional Video as the Development of Environmental Literacy**

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Abstract: The ability of each individual to behave using his understanding of environmental conditions such as taking decisions related to the environment is important to be understood by each student. This ability is often referred to as environmental literacy. This research is the development of an initial development learning video to train students to make decisions according to their understanding of the environment. This video was developed through the Decision Making Cooperative learning procedure. The initial process of developing this video by creating scripts that are adapted to learning competencies is understanding environmental conditions that affect health, and efforts to maintain environmental health. Several videos are selected that are suitable for learning conditions. Student activity settings are also included in the video including conditions that encourage students to draw conclusions. There are a number of inputs provided by the validation team to improve the videos, among others related to the setting of problems that will be used as material for discussion for students. The initial results of the development of this video show that this video can be tested on students.

Keywords: Instructional Video, Literacy, Decision Making

## 1. Introduction

Environmental problems have become the spotlight of the world society including Indonesia. Some very complex environmental problems that must be overcome include: pollution of water, pollution of soil, pollution air, and others. One of the causes of the emergence of environmental problems is low literacy and public awareness in environmental management.It must be realized that students are a representation of society. They are individuals who then become an important part of society. Then education in schools will prepare them directly to become part of the environmental conservation community. In this case, students must be educated about environmental literacy. The ability of each individual to behave using his understanding of environmental conditions such as taking decisions related to the environment is important to be understood by each student. This ability is often referred to as environmental literacy.

As one of the efforts to improve environmental literacy towards elementary school students is to include environmental material in a subject and is expected to understand and solve environmental problems such as soil pollution, water pollution, and air pollution.

With the development of information and communication technology, it has an impact on various aspects, one of which is education. The development of information technology makes

it possible to be used as an effective and interesting learning medium. Media as a tool in the learning process is a fact that cannot be denied. The development of media in the form of appropriate learning videos is expected to help students improve their environmental literacy.

With the development of this learning video, students are expected to obtain more tangible information compared to just seeing environmental images through books, which will then be an interesting learning material when equipped with pictures and videos so students can train students in the ability to make decisions. related to the environment.

Based on the background, it must be in the title "Initial Development Of Instructional Video As The Development Of Environmental Literation"

# 2. Methodology

The research is the development of an initial development learning video to train students to make decisions according to their understanding of the environment. This video was developed through the Decision Making Cooperative learning procedure by using the Sparkol Videoscribe application program and Windows Movie Maker.

Before creating learning media, the storyboard was first created and the author would design a learning video. The storyboard that will be produced contains the design of the display, content, text, video, images and music.

#### 3. Result and Discussion

The initial process of developing this video by creating scripts that are adapted to learning competence is understanding environmental conditions that affect health, and efforts to maintain environmental health. In this process researchers will design learning videos that will be produced through scripts or story boards. Storyboarding or script creation is a guide so that the learning videos that are made do not deviate from the research objectives. The story board contains goals, pictures / videos, duration, writing / sound. To create this storyboard, the researchers collected materials from various sources. Researchers include sources from which researchers take materials to make videos. After the storyboard is finished by the researcher, the researcher knows what the learning video will be like. The following is a form of Story Board's appearance on the development of environmental material learning videos:

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Figure 1. Figure of Story Board/ Script Board

Study videos that will be created using the Sparkol Videoscribe program and Windows Movie Maker. Sparkol Videoscribe is an application used to create videos with handwritten animations. In the Sparkol Videoscribe application there are lots of cool and unique animations, so that it will make students more like and entertained in teaching and learning activities. Videos from Videoscribe will also pay attention to children's reading abilities. This video was made for 3rd grade elementary school, of course the ability to read it still tends to be slow. So in this video the video playback duration is rather long. Then the video clip is finished reprocessing to merge the selected video that matches the learning conditions. For example in the subject matter for researchers on soil pollution including videos about garbage scattered in the arengka market in Pekanbaru and videos of a farmer spraying pesticides on plants.

The process of combining this video uses the Windows Movie Maker application program. Windows Movie Maker is a simple video editing program, designed for PC owners with little experience in making home videos. How to combine it is by cutting the videocribe that has been made and then entering the selected video in the middle of the Scribe video. After that, enter the voice recording. And the last step is to enter music so that the video comes alive.

Next is the stage where developing learning videos and materials that have been made tested for their feasibility. To test the feasibility of videos and learning materials, validators are needed to assess Dr. M. Jaya Adi Putra, M.Si.Learning and video learning materials developed by researchers have been revised twice.

Table 1. Instructional Video Validation Results

Validation I			Validation II	
1.	assign one image to one duration	1.	1. Fix a little video that needs to be	
2.	List the sources from which the video was taken by		fixed	
	the board	2.	Videos at the final meeting must	
3.	Make command videos for decision making		display clean behavior such as	
	activities.		showing videos of what to do	
4.	Create a video show for evaluation		before eating.	
5.	It is expected that there is no teaching so students			

	only learn through video.	
6.	When presenting the child has prepared a video for	
	student presentations	

Table 2. Learning Materials Validation Result

Validasi I			Validasi II			
1.	Develop	environmental	material	with	1.	Create student worksheets at the final
	thematic l	essons in science				meeting
					2.	For the 4th meeting the focus of material
						must have an impact on the student body

There are a number of entries provided by the validation team to improve the videos made, among others related to the composition of the problem that will be used as a discussion by students, starting from the preparation of the material to be made. The material that will be made into a video must be developed in advance to fit the Decision Making Type Cooperative Learning Model. Next is to observe the school environment that will be examined to get real problems in the student's school environment to become a problem so that students can make decisions about how to overcome problems that exist in the student's school environment. For example, for soil contamination, researchers use problems in school in the form of garbage that has been scattered behind students' schools.

The next input from the validator is a video that makes researchers too fast for elementary school children in 3<sup>rd</sup> grade so they need to revise the duration of the video. The validator provides input so that it can create a video that displays activities that must be carried out by students and for that time students will be present. Likewise when evaluation is recommended to use video. After everything is valid, the video can be tested by students.

#### 4. Conclusion

In developing learning videos, using Decision Type Type Suitcase Modeling procedures. Using the Sparkol Video and Movie Maker application programs. With the development of this video can train students in the ability to make decisions related to the environment.

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