CHAPTER I

INTRODUCTION

This chapter presents the discussion about Background of the study, Statement of the Research Problem, Objectives of the study, Significance of the study, Scope and limitation of the study, and Definition of the key terms.

A. Background of the Research

Learning media is a tool or material used to facilitate the dissemination of information as part of a teaching and learning process in an educational institution. The use of media in the teaching and learning process is very important so that students are more interested during learning activities and increase the effectiveness of communication with students. Learning is also more effective because teaching materials can convey information that sometimes cannot be conveyed by the teacher. In order for students to be involved and more interested in a subject, teaching materials must be presented as interestingly as possible by educators.

Entering the era of the industrial revolution 4.0, teachers are required to master technology and are required to be able to explain how to apply it. Technology plays an important role in human cultural life today. One indicator of the progress of human civilization can be measured by the progress of science and technology. Although now technology has developed and is easily accessible to anyone, the role of teachers cannot be replaced because of technology. Teachers must also be able to utilize technology as a medium to support teaching and learning activities.

In addition to being able to master technology as a learning medium, teachers must be able to apply it creatively so that students are motivated and enthusiastic in teaching and learning activities. Some variables or obstacles that make students less enthusiastic in learning English are caused by various factors, including the environment, it can also be from friends or other students, teacher expertise, student achievement levels, lack of

homework responsibility, and the perception of English as too difficult. With the help of this educational technology, it can increase students' interest in learning English.

Variations in the form of learning media are growing from time to time, ranging from audio, visual, audio visual, and multimedia media. Making computer-based learning media can be done by operating software, one of the media that utilizes software is Augmented Reality media that can create 3D form animations based on android and can be utilized in the world of education as a learning medium. Ariftama (2015) states that Augmented Reality is a breakthrough and innovation in the field of multimedia and image processing that is developing. This technology is able to lift an object that was previously flat or two-dimensional, as if it were real, united with the surrounding environment.

In fact, the learning process in schools so far is still less varied, the average boredom factor that makes student learning outcomes low and their lack of interest in the material being taught. As far as we know, there are still many institutions that only focus on cognitive factors and ignore students' desire for knowledge. One of the factors causing students' low enthusiasm and interest in learning is due to the absence of learning facilities. Most teachers also only explain the material from the book, and students listen to the teacher's explanation then take notes on the material, after that working on the module.

Secondary school students are students who have more dominant activeness. But what is a separate obstacle is the lack of a place for students to express themselves, because of the lack of teacher innovation that provides a place for students, so students are still very monotonous in the learning process. So the media here is very important to attract students' interest in learning and make students enthusiastic about the material provided by the teacher.

The use of simple and less varied media can also result in low student interest in learning. Susanto (2016: 66) states that "interest is a very important factor to support student learning activities". A learning activity that is carried out not in accordance with

the interests of students will negatively affect the learning outcomes of the students concerned. In addition, learning media can clarify the presentation of information from the material so that it can increase student interest in learning and the possibility of student learning outcomes can also increase.

Based on observations and interviews with several students conducted at the research location, namely SMPN 2 Panggul. In conducting learning, this school still uses books and modules as a means of conducting learning. During the English learning process, it was seen that there were some students who found it difficult to respond to the lesson, lacked interest and paid less attention to what was explained by the teacher. This is also caused by the way teachers teach in the classroom, monotonous teaching methods and the media used are less interesting causing students to become lazy and uninterested in teaching and learning activities.

This is the background of the need for the application of interesting learning aids to increase student interest in learning and meet predetermined learning objectives. One solution that can be applied in overcoming these problems is to apply Augmented Reality as a learning medium. But in a number of published literature, research that develops English learning models that utilize Augmented Reality technology as a learning medium is still not widely done. For this reason, researchers here try to develop Augmented Reality technology as a medium of English learning for 7th grade students of SMPN 2 Panggul.

Based on the description and findings of the background, the researcher wants to conduct a study entitled "DEVELOPMENT OF AUGMENTED REALITY APPLICATIONS AS ENGLISH LEARNING MEDIA FOR 7 GRADE AT SMPN 2 PANGGUL".

B. Statement of Research Problem

1. How to develop an English learning model for junior high school grade 7 SMPN 2 Panggul based on Augmented Reality that can help and facilitate students in learning English?

2. How is the description of learning media design using Augmented Reality technology in English subjects?

3. How is the students perception on the using Augmented Reality technology as a learning media?

C. Objective of The Research

The objectives of this study are:

1. To find out how to develop an English learning model for junior high school grade 7 SMPN 2 Panggul based on Augmented Reality that can help and facilitate students in learning English..

2. To find out the description of learning media design using Augmented Reality technology in English subjects.

3. To find out the students perception on the using Augmented Reality technology as a learning media.

D. The Specification of The Product

In this study, it is expected that there will be a creative learning media such as Augmented Reality technology used in 7th grade English subjects at SMPN 2 Panggul in the learning process. Product specifications of this media are:

1. Material

The material used is the topic This is My World which focuses on the introduction of objects, anmals and public buildings around students, in the 7th grade English subject SMPN 2 Panggul.

2. Media

   The developed media combines images of objects, and buildings around with today's technology.

3. User

   Augmented reality media used by teachers and students.

4. Design

   The image resolution using this media is 720p, 1280×720 pixels with a 9:16 ratio which is the standard resolution on all smartphone models. By using the Vuforia application, students scan images that have been printed using the camera on the application.

5. Simulation Object

   The simulation objects in the media are two objects, there is school and laptop

6. Device

   The device used to run this media is a smartphone with android smartphone category for all android series.

E. Significance of The Research

This research is expected to provide theoretical and practical benefits. Theoretical benefits are benefits in the form of theories obtained from research, while practical benefits are benefits provided to related parties in order to improve their performance.

1. **Theoretical benefits**

   1) This research is expected to contribute to science, especially the application of varied learning media in learning development efforts.

   2) This research is expected to be used as a new reference about interactive learning media.

   3) This research is expected to be used as a reference and input for future researchers.

2. **Practical benefits**

Practically, this research is expected to provide benefits for teachers, schools, and researchers.

For Teachers, a) as information material to add teachers' insights into the use of varied media in learning such as this AR media. b) as input that learning media such as AR is important to increase student interest in learning.

For School, a) as input in creating a more diverse and fun English learning system. b) increased information about learning media that can be used in learning English This Is My World material such as this AR media.

For Researcher, a) add insight into the use of innovative learning media in learning English This Is My World material such as AR media. b) the results of the study can be used as a foundation for further research on learning media.

F. Scope & Limitation of The Research

The scope and limitations of the problem in this research are :

1. Research focused on the development of Augmented Reality media on English subjects This Is My World material.

2. Augmented Reality media can only be accessed by Android users.

3. The subjects of this study were limited to English teachers and 7th grade students of SMPN 2 Panggul.

G. Definition of The Key Terms

To avoid errors in interpretation, the author will explain by providing several definitions contained in the title of this research:

1. Augmented Reality

Augmented Reality or AR for short is a technology that obtains real time merging of digital content created by computers with the real world. Augmented Reality allows users to see 2D or 3D objects that are projected on the real world.

AR can be defined as a technology that can be used to help visualize abstract concepts for understanding and structure of an object model. Some AR applications are designed to provide users with more detailed information than real objects.

2. Learning Media

Learning media is one of the supporting facilities in learning activities that helps teachers explain subject matter that is still abstract and difficult for students to understand. The definition of media when described according to the origin of the word consists of the words media and learning. According to Sharon (2014: 7) media comes from Latin, namely medium which means "between." This term refers to anything that carries. This term refers to anything that carries information between a source and a receiver. Media is the plural form of the word intermediary (medium) which means means means of communication. Media if understood broadly can be interpreted as humans, materials, or events that build conditions so that students are able to obtain information to increase knowledge, skills, and attitudes.