# CHAPTER I

# INTRODUCTION

This chapter talks about the research background, identification of the problem, delimitation of the problem, formulation of the problem (research question), aims of the research, significance of the research, and writing system of the research.

## 1.1    Background of the Research

Based on the writer's observation at SMPN 1 Plered, on August 2023, the students' reading in this school is still low in technology. Therefore, technology particularly Augmented Reality (AR), has become an intriguing subject of research for improving student comprehension in reading. Augmented Reality is a technology that allows users to blend the physical world with the digital world, creating interactive and engaging learning experiences. In era where technology is increasingly pervasive in classroom and students' daily lives, research on the effectiveness of Augmented Reality in students' reading comprehension has become increasingly important.

In addition, the researcher found the students motivation is still low especially in reading. There is some teaching strategies applied by the teacher to students reading comprehension that make students feel stressed and bored. In the learning and teaching process in the class the students just get the material through the explanation by teacher. The teacher using the learning media for create the effective in learning process in order to students not difficult if they will not understand of reading. Then also their motivation to learn English is still low especially in reading. From that it makes many students have low motivation in learning reading. As the effect, the students will be probably continuous difficulty in understanding any other texts.

In Law on the Education System No. 20 of 2003, it is stated that In Law on the Education System No. 20 of 2003, it is stated that Education can be defined as "a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves and society". *Kamus Besar Bahasa Indonesia* (KBBI), the word "education" means the way, method, or act of guiding because it comes from the word "didik" and gets the affix "pe" and the suffix "an". The education they receive must be standarized and meet all local needs (Ajpru, Wongwanich, & Khaikleng, 2014). From precolonial and colonial

times to early independence, Indonesia's education system underwent many changes (Faisal & Martin, 2019).

Skrbina (2015) cited in Carroll, (2017)  stated that he principle of (divine) order is first seen in the works of pre-Socratic Greek philosophers in the word "Logos", which refers to the principle of creation conveyed in the meaning of "Techne". Agar (2020) says that "Technology" is one of the most confusing buzzwords in the world. It seems that analytical categories are essential to our understanding of the whole of human history. We may feel comfortable saying that humans have had technology since Paleolithic times, and some animals, ranging from chimpanzees to crows, have even been identified as tool users. Although terms like "technology" have a longer history-like "art" and "technology", for example-the word "technology" as a category of actors has only recently come into use. However, even in English, the word "technology" has recently come to have often conflicting meanings. The history of the term "technology" dates back to the first half of the 20$^{th}$ century, when Veblen lost his critical edge and what Schatzberg calls "an apologetics developed in the United States, in which autonomous technology became associated with a deterministic concept of material progress."

Wu et al., (2013) stated that Augmented Reality (AR) research, technology is very important. For example, Klopfer and Sheldon (2010) define AR as a "technology" that combines real and virtual world experiences. The limited approach mentioned above considers virtual reality with head-mounted displays (Milgram et al., 1994). This definition reflects the early development of virtual reality technology, which usually includes head-mounted equipment that integrates virtual information into the real world. Due to the rapid development of technology, more and more software and hardware can be used to generate Augmented Reality. Advances in handheld computing, for example, are opening new avenues for Augmented Reality (Broll et al., 2008; Dunleavy et al., 2009).

Learning to read has many benefits for students as they can translate the meaning contained in the information read (Akyol, 2013). The three components of reading fluency are word recognition and word discrimination; the second component will create proper reading fluency to find relevant information (saat & zenç, 2022). Students at school level are educated and guided in reading activities. They have a lot of texts to

read to reach college level, and the level of writing required can be overwhelming for students in the first year. This may be due to the fact that the school system no longer requires them (Boakye & Linden 2018; Boakye & Mai 2016), as well as because they no longer have the close guidance and supervision of teachers and parents. In addition, students are introduced to highly technical words in their content subjects, which makes reading difficult and daunting for some students (Boakye, 2021). Therefore, it is very important for a teacher to develop technologies that students will use in those subjects (Kurniaman et al., 2022).

Sangia (2014) stated that one of the language skills that must be considered is reading. Skilled reading makes students understand lessons better. This shows that the subject of reading in the field of Indonesian studies requires greater attention. Reading skills, which are one of the four language skills, are very important for language teaching. It is said to be important because it teaches writing, listening, and speaking. One of the most effective ways to obtain various kinds of information, such as technology and science, is through reading skills. Therefore, reading is an essential part of a developed society. Similarly, in the field of education, students' ability to read has a significant influence on their academic performance. This is due to the fact that the more students understand what they read, the more knowledge they have. Therefore, students' interest and ability to read should be developed as quickly as possible. This needs to be done so that students can understand the role of reading as a communication and learning tool that helps them acquire knowledge and skills and broaden their horizons. Students with higher literacy levels will find it easier to acquire technology and knowledge found in print or written media.

Kesim & Ozarslan, (2012) stated that cinematographer named Morton Heilig argued that cinema could draw audiences into on-screen events by using all of their senses in 1950, when Augmented Reality (AR) first emerged. In "The Cinema of the Future" in 1955, Heilig built a prototype of his concept for digital computing in 1962 (Carmigniani et al., 2011). Julie Carmigniani and Borko, (2011) stated that Augmented Reality (AR) is a real-time direct or indirect representation of a physical real-world environment that is enhanced and augmented through the incorporation of virtual information created by a computer. AR combines real and virtual objects and is interactive and registered in three dimensions. Paul Milgram and Fumio Kishino define the reality-virtuality continuum as a continuum that spans between real environments

and virtual environments. This continuum includes Augmented Reality, where augmented reality is closer to the real world. Augmented Reality (AR) enhances a user's perception and interaction with the real world by conveying virtual information about his or her immediate environment and indirect views of the real-world environment, such as live video streams. Kesim & Ozarslan, (2012) stated that Augmented reality enhances the way users see and interact with the real world, allowing it to be used in the fields of education, entertainment, or education. Three-dimensional virtual images can be rotated and viewed by users from any point of view, making them similar to real objects. Virtual objects provide information that helps users complete tasks in the real world. Tangible Interface Metaphor is one of the most important methods to improve students' learning ability. By using real cards without using a mouse or keyboard, the program allows you to control three-dimensional virtual objects. Augmented Reality can help in teamwork. To improve face-to-face and remote cooperation, innovative computer interfaces can be developed that combine the real and virtual worlds. These Augmented Reality applications are more similar to natural face-to-face cooperation than screen-based cooperation, according to Kiyokawa et al. (2002).

Billinghurst (2002) stated that AR technology has evolved so that it can be applied to a wider range of applications. In the field of education, this technology can be particularly useful. There are a number of reasons why Augmented Reality provides a different educational experience. Some of them are that it supports seamless interaction between the real and virtual worlds, allows the use of tangible interface metaphors for object manipulation, and enables smooth transitions between virtual and reality worlds.

One of the most important activities in a person's life is reading. As a means, reading activity is something that is needed in almost every aspect of life. There are several factors that influence reading activities, including important activities such as information transfer, knowledge transfer, communication, and even brainstorming. The researcher is interested in implementing the Augmented Reality as a form of instructional media and proving its utilization to enhance students' reading comprehension in junior high schools. Although there has been research regarding the benefits of technology and learning applications for the development of reading, more focused investigation is needed in it the specific context of junior high school.

Researcher are interested implementing Augmented Reality as a form of learning media and prove its use to improve students' reading in junior high schools.

This research aims to bridge the knowledge gap regarding the effectiveness of using Augmented Reality, in building reading in junior high schools (SMP). Augmented Reality can be considered an educational medium. With its variety of activities and interactive features, Augmented Reality offers an appealing alternative to traditional learning, making it a form of educational media in the digital age. Educational media like Augmented Reality can facilitate more interactive learning and a deeper understanding of concepts.

In the use of Augmented Reality, teachers play a crucial role in introducing the application to students, selecting and organizing learning materials, providing support, and evaluating student progress. They can also integrate with other teaching methods to create a more engaging learning experience. Students also learn to become more self-reliant in their learning and develop better study habits. The roles of both teachers and students in Augmented Reality work together to create a more effective and engaging learning experience. Therefore, the researcher aims to conduct research on students' comprehension reading using the Augmented Reality and aims to critically and comprehensively investigate the effectiveness of Augmented Reality. Through this research, we hope to provide valuable insight into the potential of Augmented Reality in an educational context and how its use can lead to better outcomes in students' literacy and learning. With a better reading interest and skills, we can develop more effective and relevant approaches to learning for the future.

## 1.2 Identification of the Problem

From the background of the problem, this study will identify the identifications of the problem. The identification of problem in this research is formulated below:

1. The Field of the Research

   The field of this research is Reading. This research will concentrate on the discussion about improving the student's reading comprehension by using Augmented Reality.

2. The Kinds of the Problem

   The thesis is emphasizing teaching and learning reading because researcher found some problem that face by students in reading problem. The problems as follows:

a. The students have low motivation to learning reading English.

b. The students depressed or afraid to develop in their ability in reading English.

c. The students feel stressed and bored to reading English.

3. The Main Problem

The main problem of this research is the method of teaching that the teacher used is not so effective on reading till there are some of students don't mastery the reading.

**1.3     Limitation of the Problem**

To limit the scope of the research, this research only focuses on use Augmented Reality as a technology in teaching reading, especially in students' reading comprehension. The topic was taken based on the problem that exist among students at SMPN 1 Plered Cirebon. The researcher chooses students in class VII E and VII F of SMPN 1 Plered Cirebon in the 2023 academic year as the subject of this research entitled "***The Effectiveness of Augmented Reality in students' Reading Comprehension at SMPN 1 PLERED***".

**1.4     Research Questions**

1. How is the implementation of integrating a Augmented Reality to the reading of students at SMPN 1 Plered?

2. Is there any the significant effect of the Augmented Reality?

**1.5     Aims of the Research**

In this research has purposes that intend to reach as follows:

1. To explore how Augmented Reality can make reading materials more interactive and make reading more engaging and motivate students to read more frequently.

2. To describe whether there is significant effect of using Augmented Reality on students' reading comprehension at the first grade in SMPN 1 Plered.

**1.6     Significance of the Research**

The significance of the research is divided into two types. There are theoretically and practically:

1. Theoretically

The writer hopes this research can be used to give people evidence about implementation theory based on problem that faced above that is improving reading through Augmented Reality. Furthermore, the results of this study are expected to be a reference for future research related to Augmented Reality in improving students' reading comprehension.

2. Practically

This research has benefit for the research, students, and school. The contributions of this strategy are given to:

1. Students

For the students it will be useful for the students get the opportunities to improve their readings, augmenting insight on Augmented Reality technology smartphone can be used for learning media, and developing students' potential in seeking learning experiences independently.

2. Teachers

The writer hopes the result of the research give the teacher alternative solution in teaching reading and add interesting learning media inventory for students in learning.

3. Writer

Giving a great experience, it can be used in the future and it makes the writer aware that the knowledge is the greater things.

4. School

It can be as input in improvement of learning process, either English subject or the other particularly on reading.