CHAPTER I

INTRODUCTION

1.1 Background of the study

In learning a language, vocabulary mastery is essential. According to Wahyuni and Vourezky (2021), Vocabulary is a basic element in a language. In this scenario, teachers can utilize technology to aid in vocabulary instruction, as the availability of technology-based learning resources facilitates students' access to a wide range of information. The field of education is intrinsically connected to the process of teaching and learning, which involves interaction between students and teachers, whether through direct communication or via interactive learning media. The effectiveness of learning in schools is determined by the extent to which schools and teachers facilitate the acquisition of knowledge and learning skills through various forms of instructional media. Learning media, as commonly understood, refers to tools utilized to support the teaching and learning process. Moreover. Learning media can be seen as something that stimulates students' thoughts, emotions, and attention, while also enhancing their abilities and skills to foster an engaging and effective learning experience.

Educational technology is a comprehensive system that enables educators and students to engage in diverse and extensive learning experiences. It empowers students to learn independently, without limitations of space and time. With educational technology, students can access a wide range of materials that extend beyond traditional text-based presentations. They can benefit from richer learning experiences through the incorporation of various

media, including text, visuals, audio, and animation (Shiohira, 2021). As educational technology continues to advance and its supporting infrastructure improves, leveraging it in learning activities becomes crucial for enhancing the quality of education. Learning media can take the form of printed materials, audio resources, or hardware technologies. Consequently, the learning process is seen as a communicative process within a system, wherein learning media plays a significant role. As emphasized by Ahmadi (2018), the media utilized by teachers in the classroom is an essential element in facilitating language learning processes.

The 21st century is marked by rapid transformations across various domains, such as the global economy, technology, culture, society, and education. In this widely acknowledged era, it becomes imperative for educators to equip students with 21st century skills to effectively navigate the challenges of this time. The concept of 21st century education emphasizes the need for teachers to adapt their teaching methods, ensuring that students acquire the essential skills demanded by the current era. In devising effective learning strategies, teachers should skillfully incorporate technology into their teaching practices, as highlighted by (Cakrawati, 2017).

As time progresses, technological advancements are rapidly accelerating, leading to the development of artificial intelligence (AI) technology. AI, as described by Duan and Edwards, aims to enable computers to perform tasks that mimic intelligent human behavior, including analysis, inference, and decision-making. Over the past 50 years, there have been significant advancements in the concept of AI, with Talan (2021) noting the progress

made in creating AI systems that resemble thinking and feeling robots. The origins of artificial intelligence can be traced back to the summer of 1956, where it began as a process to model human thinking and design machines or tools that exhibit human-like behavior. In essence, AI is a cognitive endeavor that falls within the realm of computer science, with the goal of creating machines, such as computers, capable of performing tasks typically carried out by humans. In everyday life, AI has already proven its usefulness in various ways, and its integration into education has given rise to AI-powered tools that support the learning process, as pointed out by (Zhao, 2022). These AI-based tools, including Duolingo, Busuu, Spotify, Siri, Google Assistant, and many others, have become valuable learning media, particularly in the field of English language teaching, specifically in vocabulary development.

With the support of artificial intelligence, researchers have chosen Busuu as a learning medium to assist students in enhancing their vocabulary skills. According to (Huda, 2017), Busuu is a web-based application specifically designed for learning foreign languages. The application was introduced in 2008 by Bernhard Niesner and Adrian Hilti, who derived its name from the Cameroonian language (Álvarez Valencia, 2016). Busuu is available on both iOS and Android platforms, offering users the opportunity to receive feedback from native speakers and access downloadable lessons. Additionally, Busuu enables users to connect with fellow language learners, facilitating mutual exercise corrections (Álvarez Valencia, 2016). The Busuu learning medium proves advantageous for students in practicing vocabulary to enhance their

English proficiency. Moreover, it offers the flexibility of accessing the learning materials anytime and anywhere.

Several studies have investigated the impact of using Busuu in the field of education. Citrayasa (2019) conducted a study focusing on high school students experience with Busuu. The findings revealed that Busuu provides students with the opportunity to learn anywhere, offers an enjoyable learning experience, and serves as a valuable platform for English learning assistance. Another study by Arza et al. (2023) examined the use of the Busuu application to enhance vocabulary learning among students at SMP Negeri 35 Samarinda. The results indicated that the Busuu application was effective in improving students' vocabulary skills. Similarly, Susanto et al. (2022) explored Busuu as an online learning platform for investigating its impact on students' vocabulary learning motivation and achievement. The findings demonstrated a significant positive influence of Busuu on students' motivation to learn vocabulary.

To explore the effect of Busuu on vocabulary learning, this study adopted a mixed methods research design, by combining quantitative data analysis with qualitative interviews. The study took place over seven meetings, covering eleventh-grade students at SMA Negeri 2 Gerokgak to improve vocabulary skills in English.

This study is divided into several main chapters, starting with a comprehensive review of relevant literature on the theory of teaching vocabulary, teaching vocabulary using technology, and the benefits of teaching vocabulary using technology. The next chapter will outline the research methodology, providing an explanation of the sample selection, data

collection techniques, and analysis procedures used. Following the methodology chapter, the study presents the findings of the quantitative analysis, examining the statistical significance of increased

Through this research, it is hoped that a better understanding of Busuu's effectiveness in improving vocabulary acquisition will be achieved, ultimately contributing to the improvement of language learning practices in Indonesia and providing valuable insights for the wider community of international language learners and educators, vocabulary acquisition among Busuu users. In addition, qualitative data collected through interviews were thematically analyzed to gain insight into learners' perceptions of the app.

1.2 Problem Identification

Based on the above background, there are several problems that students face in learning English vocabulary.

Vocabulary is an essential aspect of English language proficiency as it serves as the foundation for sentence construction and other language skills. However, the lack of vocabulary teaching in Indonesia is still a pressing problem. Various factors contribute to this issue, including school-related, teachers-related, and student-related factors. Teachers often struggle with incorporating technology into vocabulary instruction, while schools lack sufficient facilities like language labs and face limitations on accessing WiFi. Consequently, students experience a lack of vocabulary, which hinders their ability to express ideas confidently in English.

Related to these problems. Addressing these challenges, Busuu, as a learning medis, can assist students in developing their vocabulary skills

within the classroom. Citrayasa (2019) suggests that using Busuu creates an engaging and enjoyable learning experience, fostering students' independence in learning. Additionally, Susanto et al. (2022) highlights the strong influence of Busuu on students' motivation to learn vocabulary.

Considering these advantages, this study aims to examine the effect of Busuu on students' vocabulary skills. Busuu is implemented in vocabulary instruction within the classroom due to its effective attention to improving students' skills. Therefore, utilizing Busuu as a learning medium can alleviate students' difficulties in vocabulary learning.

1.3 Problem Limitation

The limitation of this study is that the researchers focused on the effect of Busuu on students in the experimental and control classes of XI grade at SMA Negeri 2 Gerokgak.

1.4 Research Problem

- 1. Is there any effect of the Busuu application on the vocabulary mastery of students in eleventh grade at SMA Negeri 2 Gerokgak?
- 2. What is the student's perception in eleventh grade at SMA Negeri 2 Gerokgak of the implementation of the Busuu application?

1.5 Purposes of the Study

In relation to the research problems mentioned earlier, the main objectives of this study are twofold. Firstly, it aims to investigate the impact of the Busuu application on students' vocabulary mastery at SMA Negeri 2

Gerokgak. Secondly, the study seeks to describe how students perceive the implementation of the Busuu application at SMA Negeri 2 Gerokgak.

1.6 Significance of the Study

This study is significant for the students, the school, and the other researchers, as described below:

a. For the teachers

It is hoped that with this research, the teacher will have clear information about the various learning media in teaching English to get the desired feedback.

b. For the Students

It is hoped that with this research, students will know that with the Busuu application, students can learn vocabulary quickly.

c. For the School

The results of this study are expected to be able to help schools in improving existing learning media. Until the teaching and learning activities of students in schools become effective and able to keep up with existing developments.

d. For the other research

It is hoped that later with the results of this research, this research can provide relevant information for other researchers conducting their research.