CHAPTER I

INTRODUCTION

1.1 The Background of the Problem

In today's education landscape, where technology plays an increasingly central role, reading remains a fundamental skill for students. According to Thomson et al. (2018), advancements in digital tools have reshaped how children engage with texts and learn to read, highlighting the importance of understanding the impact of these changes on students' digital reading behavior. Meanwhile, O'Reilly and Sabatini (2016) emphasize that reading literacy among Indonesian adolescents continues to face significant challenges, pointing to an urgent need for improvement in students' reading proficiency.

In Indonesia, especially at SMA Negeri 11 Jambi City, the issue of low reading comprehension among students remains a major concern. Several factors contribute to this problem, including limited reading interest, insufficient access to engaging materials, and conventional teaching strategies that may not meet students' diverse learning needs. Recognizing these challenges, there has been a growing interest in exploring technology-enhanced solutions for education. Technology-enhanced learning tools such as *Readable* offer potential solutions by providing accessible and engaging reading experiences that can be customized to the needs of individual learners. However, despite the promise of technological solutions, their successful implementation often faces various barriers that need

careful consideration. Given these issues, technology-enhanced learning tools have been increasingly considered as innovative solutions.

Reading comprehension is an essential skill for English language learners, especially in understanding various text types used in the curriculum. Among these, *narrative text* plays an important role because it helps students develop the ability to understand story structures, infer meaning, and interpret moral values embedded in the story. However, many students still face difficulties in identifying the main idea, sequencing events, and interpreting implicit messages in narrative passages. Therefore, integrating digital reading tools such as the Readable Application can be an effective way to assist students in comprehending narrative texts more efficiently and engagingly.

Implementing such applications, however, still poses problems and issues. The integration of technology into education, especially with the use of IoT, was found to be highly influenced by teachers' educational perceptions, their attitudes towards digital devices, and the availability of technological tools (Patton et al. 2019). For example, students from lower socio-economic levels are likely to experience lack of access to educational applications which can in turn impact reading skill attainment differently compared to their counterparts from higher socio-economic classes. Therefore, there is a pressing need to investigate how such applications can be effectively integrated into diverse educational settings, especially SMA Negeri 11 Jambi City. Thus, attention must also be paid to the practical challenges of technology integration.

Educational applications can be utilized as a solution for improving students'

reading skills. Supporting tools for reading comprehension, such as Readable, epitomize this criticism. Other research has found that education technology, including gamification and learning analytics, has positively impacted students' participation in the activities (Cassano et al., 2019). These findings encourage further exploration into specific applications like Readable to determine their direct effects on student reading comprehension. Motivated by these encouraging findings, it becomes essential to further investigate specific tools like Readable.

Past studies on Readable have shown results. (Aisyah, 2024) reported improvement in the comprehension of narrative texts in Jakarta high school students after using the app for 6 weeks. Likewise, (Jannah et al., 2024) noted 35% increase in reading motivation in students in Yogyakarta. However, both studies have limitations: the emphasis on urban private schools and not analyzing the technical difficulties of incorporating the app into the local curriculum. This highlights the necessity of conducting more comprehensive research in varied educational contexts. Despite these promising results, limitations remain in prior studies which must be addressed.

There is a gap in the literature on regional public schools with scarce resources. Take SMA Negeri 11 Jambi City, for instance; it suffers from unreliable internet connection, unstable internet infrastructure, and a lack of training for teachers on technology-use. Also, no studies have looked into the longitudinal effectiveness of Readable within an English learning context. Addressing these gaps provides an opportunity to expand the understanding of Readable's impact in less-privileged school environments.

The Readable Application is based on the Simple View of Reading theory, which states that reading comprehension is a product of the interaction of two factors, which are the ability to decode and understand language. This app comes with multiple features aimed at improving comprehension skills. Firstly, it provides students with automatic translation so they can access underlying vocabulary and sentence structures. Secondly, the design of the application contains motivational content such as fascinating stories, and vocabulary missions that are aimed to increase immersion. Finally, the cross-platform nature of the application ensures students can conveniently access the application on different devices, making it ideal for class-based or self-paced learning (Jofitasari, 2022).

Additionally, *Readable* offers comprehension exercises in the form of interactive quizzes and multiple-choice questions, which can be adjusted based on the user's proficiency level. The personalization feature enables students to set the difficulty level of the texts and receive reading recommendations tailored to their interests and abilities. The application provides real-time feedback on users' comprehension levels, helping them identify areas that need improvement. The goal of this research is to address these gaps by implementing Readable into a public school classroom in Jambi.

Based on the researcher's experience during the Field Experience Practice (PPL) at SMA Negeri 11 Jambi City, many students have difficulty in reading comprehension and prefer digital media to printed texts.

considering these realities, the current research aims to analyze the effectiveness of the Readable application in improving students' reading comprehension at SMA Negeri 11 Jambi City.

This research aims to analyze the effectiveness of the Readable app in improving students' reading comprehension. This research will also compare students' reading performance before and after using Readable. The findings are expected to contribute to improving literacy education and optimizing digital learning strategies at SMA Negeri 11 Jambi City Grade eleven. Based on these considerations, the researcher intends to conduct a research "The Effect of Readable Application on Students' Reading Ability at Eleventh Grade of SMA Negeri 11 Jambi City".

1.2. Identification of the Problem

The purpose of this research is to analyze the effectiveness of the Readable application in improving students' reading skills at SMA Negeri 11 Jambi City. Specifically, this reseacrh aims to analyze the effectiveness of the Readable application in improving students' reading comprehension and identify the challenges faced by students and teachers in implementing the Readable application in reading instruction. In addition, the research also aimed to compare students' reading performance before and after using the Readable app to assess the changes that occurred. With these objectives, the research is expected to provide insight into the potential of Readable app as a tool in improving students' reading ability.

1.3. Limitation of the Problem

The limitations of the research are as follows:

1. This research only focuses on eleven grade students at SMA Negeri 11 Jambi City.
2. The research specifically examines the effectiveness of the Readable application in improving reading comprehension, excluding comparisons with other digital reading tools.
3. The research primarily analyze narrative text.

1.4. Formulation of the Problem

a. Is there any significant effect of using the Readable application on students' reading comprehension at SMA Negeri 11 Jambi City?

1.5. Objective of the Research

a. To determine whether there is a significant effect of using the Readable application on students' reading comprehension at SMA Negeri 11 Jambi City.

1.6. Significant of the Research

Theoretically, this research contributes to the development of reading comprehension theory in EFL contexts by applying the Simple View of Reading and Multimedia Learning Theory.

It provides empirical support for the idea that digital reading tools, such as the Readable application, can enhance students' comprehension by combining textual input with multimedia features. This supports the relevance of dual-channel processing in facilitating deeper understanding, especially for learners in technology-integrated classrooms.

1.7 Definition of Key Terms

a. **Reading Ability:** The capacity of students to comprehend. In this research, reading ability refers specifically to students' skills in understanding and processing texts used in their academic learning at SMA Negeri 11 Jambi City.

b. **Readable App:** A digital reading application designed to enhance students' engagement in reading activities by providing interactive features such as listening options and a variety of reading materials.

1.8 Basic Assumption

1. Students Reading Ability Can Be Improved with Proper Instructional Support

It is assumed that students' reading performance is not fixed, but can be significantly enhanced through appropriate instructional strategies, materials, and tools. Therefore, the use of the Readable Application is expected to provide meaningful support to improve reading comprehension.

2. Readable Application Provides Accessible and Engaging Ledarning Materials

The research assumes that the digital application offers texts that are suitable for the learners' proficiency levels and incorporates interactive features (translation, dictionary, quizzes, text-to-speech) that can facilitate students' understanding and motivation.

3. Students Are Familiar with Basic Digital Literacy

It is assumed that the participants have sufficient familiarity with smartphones or digital devices to operate the Readable Application effectively without significant technical barriers.

4. Improvement in Reading Scores Reflects the Effect of the Treatment

The research assumes that the observed improvement in pre-test and post-test scores can be attributed mainly to the treatment (use of the Readable Application), since other external factors such as prior exposure to English texts, individual motivation, or socio-economic background are not the primary focus of this.

5. Reading Comprehension Is a Measurable Construct

The research assumes that reading comprehension can be assessed objectively through standardized multiple-choice tests, and that test results reflect students' actual comprehension abilities at the time of testing.

6. Cluster Sampling Produces a Representative Group

Since the research uses one intact class (XI F1) selected through cluster sampling, , it is assumed that this group is sufficiently representative of the larger population of eleventh-grade students at SMA Negeri 11 Jambi City in terms of reading proficiency and learning characteristic.