

CHAPTER I

INTRODUCTION

This chapter presents the introduction of the study, including the Background of the study, research problems, objectives, significance, scope and limitation, and definition of the key terms.

A. Background of the Study

The integration of technology in English Language Teaching (ELT) has significantly transformed traditional pedagogical approaches, enabling more interactive and engaging learning experiences (Mahdi, Sabbar, & Abbas, 2023). Digital tools, such as Learning Management Systems (LMS), mobile applications, and artificial intelligence-based platforms, have been widely adopted to facilitate language acquisition and communication skills development. With the advent of Web 2.0 technologies, learners are no longer passive recipients of information but active participants in their learning process.

One of the key advantages of technology-enhanced ELT is its ability to provide personalized and adaptive learning experiences. Recent studies have shown that artificial intelligence-powered language learning applications, such as Duolingo and Grammarly, can offer instant feedback and customized exercises based on individual proficiency levels. Moreover, the incorporation of gamification elements in digital learning environments has been proven to increase learner motivation and engagement (Deterding et al., 2017).

Despite its numerous benefits, the integration of technology in ELT also presents challenges. Teachers often face difficulties in selecting appropriate digital

tools that align with curriculum objectives and students' learning needs. Additionally, the digital divide remains a pressing issue, as access to technological resources varies significantly across different socio-economic backgrounds. Therefore, it is essential to examine the effectiveness and limitations of technology in ELT to ensure its optimal implementation in diverse educational settings.

Technology integration can also be used in English language teaching such as vocabulary mastery. A rich vocabulary not only supports communication skills, but also lays the foundation for the development of reading, writing, listening and speaking skills. Vocabulary learning at an early age is an important starting point in second language acquisition. In addition, vocabulary acquisition also plays a crucial role in the development of learners' language skills (Nasrullah et al., 2024).

One of the key issues in vocabulary learning is the lack of sufficient exposure and practice, which hinders students' ability to retain and use new words effectively. Research has shown that traditional rote memorization techniques, commonly used in many educational settings, may not be the most efficient method for long-term vocabulary retention (Laufer & Hulstijn, 2001). Communicative approaches and contextualized learning strategies have been found to be more effective in fostering vocabulary acquisition. Godwin-Jones (2018) emphasizes that contextualized vocabulary learning, which involves understanding words within meaningful contexts, enhances retention and practical usage. A lack of motivation and engagement can hinder vocabulary learning. According to Lee (2020), motivated learners are more likely to employ effective vocabulary learning strategies, leading to improved language proficiency. Furthermore, disparities in students' learning styles and cognitive abilities suggest that a one-size-fits-all approach to vocabulary

instruction is often ineffective. Differentiated instructional strategies that accommodate diverse learning styles can enhance student engagement and learning outcomes.

Mobile-Assisted Language Learning (MALL) is an example of how technological advancements have transformed language learning. The rise of mobile apps for language teaching has significantly impacted education, particularly through their use of gamification, which makes learning engaging and enjoyable. This study examines previous research on how Duolingo influences students' English vocabulary acquisition. It explores the advantages, challenges, and specific features that impact vocabulary retention and application. MALLs have been shown to be highly effective in language education, offering flexible, accessible, and easy-to-use tools (Godwin-Jones, 2011; (Chinnery, 2006)

Duolingo, a widely used language learning app introduced in 2011, has supported numerous learners in developing vocabulary and language skills through its gamified and mobile-friendly approach. Research by Ajisoko (2020) revealed that students using Duolingo experienced a notable improvement in vocabulary, with average test scores rising from 44.75 on the pre-test to 59.75 on the post-test. Numerous studies have highlighted the significant advantages of such apps for language learners. While researchers have explored Duolingo's influence on various language abilities in recent reviews, only a limited number of studies have specifically addressed its impact on English vocabulary acquisition. Several previous studies have explored the advantages of using Duolingo for autonomous learning, student engagement, and vocabulary development in English as a foreign language (EFL) setting. Hernadijaya (2020) and others have demonstrated that

Duolingo fosters independent learning by enabling students to practice vocabulary outside the classroom while boosting engagement with its gamified features.

Similarly, Martínez (2020) examined students' perceptions of Duolingo during their preparation for a vocabulary exam. The findings indicated that the app promoted active learning, provided students with greater independence, and motivated them to continue expanding their vocabulary. Zamzami (2019) examined the impact of using Duolingo on students' English vocabulary improvement. Conducted with tenth grade students, this study used a quasi- experimental design with pre-test and post-test. The results showed a significant improvement in students' vocabulary acquisition after using Duolingo regularly for four weeks.

Although Duolingo has become one of the most popular language learning apps, its effectiveness in improving vocabulary mastery is still questionable. Some studies suggest that the gamification approach used by Duolingo tends to lack depth in creating real contexts of word use, so learners often only temporarily remember words without strong contextual understanding (Crowther et al., 2017). Loewen et al. (2019) in a case study of Duolingo revealed that although users experienced a minimal increase in vocabulary, the app failed to produce long-term retention and deep semantic understanding.

The study expects that Duolingo's gamification learning approach can motivate students and improve vocabulary mastery. The above research consistently shows that the Duolingo app has a positive impact on students' English vocabulary acquisition. Its gamification and interactive approach increase student engagement and supports vocabulary retention. However, some studies also note

that while Duolingo is effective for basic vocabulary, the app may need to be supplemented with other resources for more advanced language skills.

The researcher focuses on the topic “The Effect of Duolingo Application on Students' English Vocabulary Mastery at MTsN 2 Kediri”. Because, this study aims to compare the effectiveness of the Duolingo and flashcard applications in improving junior high school students' vocabulary skills.

B. Research Problem

Based on the background of the study above, the research problem is as follows:

Is there a significant difference in students' vocabulary mastery between those taught using the Duolingo application and those taught using flashcards at MTsN 2 Kediri?

C. Research Objectives

This study aims to investigate the effectiveness of the Duolingo application compared to flashcards in improving students' English vocabulary mastery at MTsN 2 Kediri.

D. Hypothesis of the Study

To clarify the objective of this study, the hypotheses are formulated as follows:

- Null Hypothesis (H0)

There is no significant difference in vocabulary mastery between students taught using Duolingo and those taught using Flashcard.

- Alternative Hypothesis (HA)

There is a significant difference in vocabulary mastery between those taught using Duolingo and those taught using Flashcard.

E. Significances of the Study

In this rapidly evolving digital age, integrating technology into education is becoming increasingly important. By examining its effectiveness and user experience, this research aims to provide valuable insights and hopefully be useful for the Students', English Teacher, and Future Researcher:

1. For Students

For the students, it is hoped that the results of this study can enhance their abilities. In other words, the primary objective of the research is to determine if using Duolingo can increase their mastery of vocabulary. Duolingo is not just a learning tool, there are many aspects that you can enjoy from Duolingo such as Available on Android and Ios, effective, and easy to access, Duolingo enhances students' experience and helps them learn exciting ways to use Duolingo to enhance vocabulary mastery.

2. For English Teachers

For teachers, it provides further details to the teacher about a new type of classroom application that can be employed to increase vocabulary mastery and raise the quality of the teacher's English lessons. Additionally, the researchers hope this study will provide teachers with new insights into learning, especially in vocabulary mastery. Furthermore, the results of this study also aim to convey students' experiences using Duolingo to enhance their vocabulary mastery.

3. For Future Researchers

For future researchers this study may serve as a reference or foundation for further academic inquiry. It can offer a practical perspective on how technology impacts language learning, particularly in English instruction. Additionally, the

findings may open up new avenues for exploration, helping future researchers identify gaps or areas that need deeper investigation.

F. Definition of the Key Term

1. Mobile-Assisted Language Learning (MALL):

MALL is a method of language learning facilitated by mobile devices and applications, which emphasizes accessibility and interaction. MALL enables flexible language learning by utilizing mobile technology to provide a personalized and affordable learning experience.

2. Duolingo

Duolingo is a game-based language learning application introduced in 2011. It is designed to develop vocabulary and language skills interactively. Duolingo is effective in helping users acquire new vocabulary with a gamification approach.

3. Vocabulary Mastery

Vocabulary mastery involves the learning and retention of new words and their meanings in a particular language. Vocabulary is an essential element in language learning, and vocabulary acquisition requires repeated practice and contextualization.

4. Flashcard

Flashcards are learning aids that consist of cards containing information, usually with a question, term, or picture on one side and an answer or explanation on the other. They are often used to improve memorization and practice vocabulary skills through active recall and repetition.