

CHAPTER I

INTRODUCTION

1.1 Background

The development of information and communication technology (ICT) in the 21st century has rapidly transformed many aspects of life, including the field of education. One of the significant changes is the shift in learning methods that no longer rely solely on conventional classroom-based instruction, but also incorporate various digital tools and platforms. This transformation has opened up new opportunities to enhance student learning experiences through technology-enhanced methods. Among these, online games have emerged as a potentially effective and engaging tool in the learning process, particularly for teaching foreign languages such as English.

In the context of language learning, online games are often designed with specific educational goals, such as vocabulary enrichment, grammar practice, listening comprehension, and communication skills. They offer a dynamic and immersive environment where students can learn English in an entertaining, low-stress, and repetitive manner—characteristics that are essential in second language acquisition. According to Yolageldili and Arikan (2011), the engaging nature of online games has been shown to improve students' learning outcomes and stimulate intrinsic motivation to learn, particularly among younger learners."

From a theoretical perspective, this phenomenon is supported by the constructivist learning theory proposed by Jean Piaget and Lev Vygotsky (1978). According to this theory, learners actively construct their own knowledge and understanding through experiences and interactions with their environment.

Learning is not a passive process of receiving information, but an active process of meaning-making. In line with this, Vygotsky also emphasizes the social context of learning, especially through the concept of the Zone of Proximal Development (ZPD), which suggests that learners can achieve higher levels of understanding with the help of tools, peers, or guidance from teachers. Online games can serve as these supportive tools, providing both individual and collaborative learning opportunities in a digital environment.

Marc Prensky (2001), who introduced the concept of digital natives, argues that today's students—those who have grown up surrounded by digital technology—learn differently from previous generations. They are accustomed to fast-paced, multimedia-rich environments, and traditional classroom methods may no longer be sufficient to capture their attention or meet their learning preferences. According to Prensky (2001), integrating game-based learning strategies can significantly enhance student motivation, engagement, and retention. When students are engaged, they are more likely to persist in their learning and achieve better outcomes.

The use of online English games is anticipated to be a practical and innovative solution that may enhance the English learning process. These games have the potential to present language content in a fun and interactive format while allowing students to learn at their own pace, receive instant feedback, and engage repeatedly with key language structures. Such an approach could help reduce learning anxiety and increase motivation, particularly among students who perceive traditional classroom instruction as rigid or monotonous. Furthermore, online games may foster the development of essential 21st-century skills, including collaboration,

critical thinking, and digital literacy, which are increasingly important in modern education (Zahra, Neo, & Hew, 2022).

Although the popularity of educational games is on the rise, particularly in urban and technologically advanced environments, their real impact on the learning process—especially in rural or under-resourced school settings—has not been thoroughly examined. Digital game-based vocabulary learning has a positive effect on students' motivation, interactivity, and repetition, which plays a major role in enhancing their vocabulary acquisition (Vnucko & Klimova, 2023).

In line with this, Sooai (2021), education games are designed—not only to entertain but also to stimulate cognitive and linguistic development, making them effective learning tools. Furthermore, Sooai emphasizes that the integration of Artificial Intelligence (AI) in smart games enable a more personalized and adaptive learning experience. AI can adjust the level of difficulty, provide real-time feedback, and guide players toward content suited to their needs and abilities. This makes AI-powered smart games a promising educational innovation for digital-native generations such as Generation Alpha.

Generation Alpha is a generation that has grown up with digital technology and internet access from an early age. Their daily activities are closely connected to electronic devices, including the use of online games as part of their lifestyle. Online games are not only a source of entertainment but also provide opportunities for learning new vocabulary, as many games use English as the main language. Through repeated and contextual exposure in an interactive environment, students can develop their vocabulary learning in a natural and enjoyable way. Ratnalestari (2022) explains that exposure to English in online games can indirectly support

students' vocabulary learning through meaningful language use during gameplay.

The online game Wordle is an effective tool for learning English, particularly in enhancing vocabulary and grammar skills. In this game, learners are challenged to guess five-letter words within six attempts, which encourages critical thinking, vocabulary recall, recognition of letter patterns, and an understanding of word structure. The game's engaging yet low-pressure environment helps students develop lexical knowledge and morphological awareness in an enjoyable way. In addition to Wordle, Kahoot! provides an interactive learning experience through game-based quizzes that can be played live and collaboratively. Kahoot! not only supports vocabulary and grammar acquisition but is also highly effective in developing listening and speaking skills. Through real-time competition, students practice listening carefully, responding quickly, and expressing their thoughts confidently—key competencies in communicative language learning.

Li et al. (2020), Nguyen (2021), and Wicaksono and Rachmadtullah (2022) highlight that incorporating game elements into language learning enhances intrinsic motivation and creates a more enjoyable and effective learning atmosphere. In this context, Duolingo serves as an ideal complement to Wordle and Kahoot! through its adaptive, technology-based approach. Duolingo integrates Artificial Intelligence (AI) to adjust content according to the user's ability and progress, while also offering gamified features such as points, levels, and daily challenges. The combination of these three platforms fosters a multimodal learning environment that supports vocabulary, grammar, listening, and speaking development, while also catering to the characteristics and learning preferences of Generation Alpha.

This opens opportunities for the education sector to utilize online games and language learning applications as alternative learning media that align with students' characteristics and interests. Based on this background, this study aims to investigate the influence of English-language online games on the vocabulary acquisition of eighth-grade students at SMP Kristen Harapan Soe in the context of English language learning. In light of these considerations, this study seeks to explore the influence of online games on the English learning process of second class students at SMP Kristen Harapan Soe. As this research has not yet involved formal interviews or detailed fieldwork, the present study aims at gathering first-hand data regarding students' experiences, behaviors, and learning outcomes associated with the use of online English games. The findings are expected to contribute valuable insights for teachers, school administrators, and educational policymakers in designing more engaging, student-centered, and technology-integrated English learning strategies that are suitable for the digital age.

In the specific context of SMP Kristen Harapan Soe, a junior high school located in a developing region, English is taught as a compulsory subject. Although in-depth interviews with teachers and students have not yet been conducted, preliminary insights based on classroom observations, informal discussions with educators, and literature on similar educational settings suggest that eighth-grade students may face several challenges in learning English. These challenges include low motivation, limited vocabulary learning, lack of confidence in speaking, and minimal exposure to English outside the classroom environment. Moreover, conventional teaching methods that predominantly rely on textbook-based learning and teacher-centered instruction are often considered less effective in engaging

students or accommodating their diverse learning styles. In response to these challenges, this study focuses on the integration of specific online English games, namely Wordle, Kahoot!, and Duolingo, which are used as learning media to support vocabulary learning in an interactive and student-centered manner. Therefore, this study is conducted to investigate whether the use of these online games can help address the identified challenges and enhance students' English learning experience, particularly among Generation Alpha learners.

1.2 Research Problems

From the background information, the researcher identifies the research problem as following:

1. How does the use of online games affect students' English vocabulary learning in the English learning process of eighth-grade students at SMP Kristen Harapan Soe?
2. What are the supporting and inhibiting factors in the use of online games in students' English vocabulary learning at SMP Kristen Harapan Soe?

1.3 Aims of Study

The aim of this research is to find out

1. To investigate the effect of online games on students' English vocabulary learning in the English learning process of eighth-grade students at SMP Kristen Harapan Soe.
2. To identify the supporting and inhibiting factors in the use of online games for students' English vocabulary learning at SMP Kristen Harapan Soe.

1.4 Significance of Study

1.4.1 Implication

This study indicates that the use of online English games can enhance students' English language proficiency. This aligns with the findings of Huang et al. (2024), who state that Digital Game-Based Learning (DGBL) significantly improves performance and motivation among EFL learners. The integration of GBL also has the potential to transform conventional teaching methods into more interactive approaches, as highlighted by Sari and Pratama (2023).

Students tend to be more interested and engaged when learning is delivered through enjoyable platforms, supporting Almusharraf and Almusharraf's (2022) findings on the effectiveness of digital media in increasing learner engagement. This encourages teachers to adopt more student-centered approaches (Park & Kim, 2021).

Furthermore, these findings highlight the importance of digital literacy and 21st-century skills, as discussed by Chen et al. (2023), who identified digital literacy as a core competency in modern education. Additionally, this research offers insights for schools in under-resourced areas to utilize low-cost yet effective educational technologies, in line with UNESCO's (2021) recommendations.

1.4.2 Application

The findings of this study can be applied in various educational contexts to enhance the English language learning process through online games. Teachers may incorporate selected online English games into their daily teaching routines to increase student motivation and engagement, aligning with the findings of

Huang et al. (2023) and Almusharraf and Almusharraf (2022), who emphasize the positive impact of Digital Game-Based Learning (DGBL) on learners' motivation.

Lesson planning can be improved by integrating interactive and game-based activities, which has been shown to increase classroom participation and learning outcomes (Sari & Pratama, 2023; Susaniari & Santosa, 2024). Furthermore, educational institutions may utilize these findings to design professional development programs that prepare teachers to effectively apply game-based learning strategies (Kaimara et al, 2022).

For schools in rural or under-resourced areas, policymakers may consider this study as a foundation for promoting the use of information and communication technology (ICT) in classrooms. Lo and To (2023) and UNESCO (2021) highlight the importance of providing ICT support and infrastructure to ensure equitable access to digital learning tools.

School administrators may invest in cost-effective and curriculum-aligned online platforms that support language learning through games (British Council, 2021). In addition, this study can guide educators in selecting game types—such as simulation or vocabulary-based games—that are most effective for second language acquisition (Hafiza & Pratolo, 2024).

Students are also encouraged to use educational games independently as supplementary learning resources, fostering learner autonomy and reducing language anxiety (Ahmed, 2022). By applying these insights, educators can create a more interactive, engaging, and flexible language learning environment (Tsang & Davis, 2024). Finally, the outcomes of this research may serve as a basis for

further studies on the integration of digital media in second language acquisition
(Taufik et al., 2020).