

CHAPTER I

INTRODUCTION

1. 1 Background of the Study

“Education is the most powerful weapon which you can use to change the world” this Nelson Mandela’s quote resonates profoundly in today’s globalized society where the integration of second language acquisition, particularly English, and technology in education has become inseparable. Mastery of these skills is essential for individuals who striving to turn their dreams into reality, as they unlock opportunities across various fields. The importance of education particularly in learning English and technology usage has become a vital skill for those who seek success in fulfilling their dreams into reality, transforming opportunities across diverse fields not only in education but also in career advancement, or simply mastering international communication. Establishing a solid foundation in learning English which is supported by technology that brings more engaging way for learning experience at the very beginning has become essential for primary school students. Hence, mastering vocabulary skill is one of the crucial things to be developed since at the early stage of the educational English students learning journey.

According to Widyahening (2018, 12), English language is a mandatory lesson that needs to be taught in Indonesia since early childhood until higher education, as English is an essential language in preparing for the era of Industry revolution 4.0. There are four basic skills to achieve proficiency in English, those

are listening, speaking, reading, and writing. In order to have those successful skills, thus the vocabulary acquisition plays a major role in learning English. As having proficient vocabulary skills do not only become one of the key elements to enhance students' communication abilities and reading comprehension but also contribute to their overall academic success in mastering English. According to Setiawan & Wiedarti (2020), it is emphasized that students should acquire proficiency in English vocabulary prior to expressing verbal or written communication. Likewise, Maritha & Dhaki (2017) highlight the significance of focusing on teaching vocabulary as a crucial language English skill for the students. However, acquiring vocabulary as a second language has been identified as a challenging thing for numerous students (Tsai & Tsai, 2018). In addition, Sumarnov and Azimova (2020) state that students often encounter difficulties in selecting the correct meanings of words and often struggle with the contextual usage of words. For many learners of foreign language like English, they perceive vocabulary learning as merely of memorization process which results in stressful and boring things to do (Wahyuningsih, 2018). Addressing this matter, Aisyiah (2017) recommends the implementation of effective strategies in vocabulary learning and teaching. Both educators and learners can seek optimal methods and techniques to enhance vocabulary learning through technology utilization that can capture students' interest and enthusiasm in learning English vocabulary (Setiawan & Wiedarti, 2020). In addition, learning vocabulary through listening, reading and writing help the students to enhance the ability to comprehend overall language proficiency.

As myriad primary students, especially public-school students struggle with improving their vocabulary due to various challenges. One of the significant

obstacles is a limited exposure to English both inside and outside of the classroom since English class is only scheduled once a week therefore it is becoming one of contributing factors for having lack of English practice and exposure. Besides, insufficient interactive learning that utilizes technology and many other factors have become barriers for the students to expand their English vocabulary skill.

Based on the findings which the researcher gathered during observation and interview with the English teacher and some of the students of SDN Sewan Kebon, the researcher found several problems that needed to be attended especially for the three classes of grade 5 students there. Most of the students were still having difficulty in understanding simple English instructions through speaking or written text due to their very limited basic English vocabulary which hinder their ability to comprehend and communicate optimally. Moreover, the students looked demotivated during English class, assuming English lesson was hard and challenging one.

According to the findings above the researcher identified to have a breakthrough in teaching English vocabulary was needed in order to foster engaging and interesting vocabulary learning experience especially by developing and utilizing media vocabulary gaming app. Although previous studies acknowledge the benefit of technology into education through the utilization of interactive educational media applications, such as digital storybooks and online learning platforms, which have the capacity to motivate and captivate learners (Astutik et al, 2022, Harahap & Kembaren, 2023; Perez et al., 2021; Saffold, 2021; Tiftik, 2021; Taghizadeh & Yourdshahi, 2020). There is a significant research gap in the field of creating English vocabulary game apps specifically designed for primary students

to motivate and involve students with fun and engaging materials. The research that focused on creating, constructing, and assessing English vocabulary game applications for primary students is still limited.

The researcher chose gaming app as a teaching media for learning vocabulary are for several reasons. Five grader students are far more interested and enthusiastic in learning when the researcher involves gaming app during teaching, utilizing gaming app can be very accessible virtually from any location, this too surely can help them to learn in a dynamic and engaging platform for a simultaneous learning and play. As the English teacher in SDN Sewan Kebon also never utilizes gaming app in teaching before or using vocabulary gaming app that the researcher develops. Hence, introducing the vocabulary gaming app will provide additional learning experience which can aid in their learning as well as offering fun, enjoyable, and memorable approach in their vocabulary acquisition. Therefore, this research intends to delve deeper into designing, developing and testing a tailored vocabulary game app for grade 5 primary students.

1.2 Problem Identification

Based on the observation that the researcher does during her several voluntary teachings on grade 5 students in SDN Sewan Kebon and the interviews with their English teacher and students. There are several findings that have surfaced to certain challenges that need immediate attention:

- 1) The students found difficulty in replying to simple conversation and reading questions due to their limited vocabulary understanding.
- 2) The students looked very demotivated and lack of participation throughout

English class due to lack of interactive media usage.

- 3) The students found challenges in translating from Bahasa Indonesia to English vocabulary.
- 4) The students were having difficulty in comprehending simple words and applying them during the lesson.
- 5) The students were unable to focus and concentrate due to their limitation in solving the problem in English during the lesson.
- 6) The students rarely used computer, or interactive media learning while learning English.

1.3 Limitation of the Problem

Following an in-depth investigation through observation on several meetings and interview among the English teacher and the students regarding learning the English vocabulary the researcher proposes three limitations to the problem. First, based on the observation it is found that the students still have limitation to their English vocabulary, resulting difficulty for them to answer the questions whether in oral or written. Second, according to the interview with the English teacher. Teaching English involving interactive teaching media still becoming somewhat a rare thing for them to experience. Third, the researcher would like to analyze the experience of the students in implementing Infinity vocabulary game app which involves listening, reading and writing ability.

The implementation and utilization in learning process that involves interactive media can become a solution due to the problems which are faced both

by the teacher and students especially in learning English. The implementation of interactive media in the classroom is based on several considerations:

- 1) The students rarely expose themselves to interactive media tools for learning.
- 2) In order to gain the students' motivation during learning, it has to start from the thing that they might enjoy first.
- 3) SDN Sewan Kebon has a computer lab facility that is very seldom utilized.
- 4) Interactive media can facilitate various learning styles such as visual, audio and kinesthetics.
- 5) Interactive media can have direct feedback toward students' progress, therefore it is more effective.

1.4 Formulation of the Problem

According to the above background which has been stated, the researcher formulates several problems, they are:

- 1) How is the development and utilization of Infinity Vocabulary Game App for grade 5 SDN Sewan Kebon students?
- 2) How does the use of an English Vocabulary Game App improve the students' English vocabulary acquisition compared to traditional teaching method?
- 3) How are students' perception and motivation while using the Infinity Vocabulary Game App in the classroom?

1.5 Purpose and Research Benefits

The purpose of these research studies is as the following:

- 1) Analyzing and describing the development and utilization of Infinity Vocabulary Game App in English lesson for grade 5 students of SDN Sewan Kebon.
- 2) Investigating the effectiveness of the developed English Vocabulary Game App for grade 5 students of SDN Sewan Kebon.
- 3) Evaluating the students' perception towards their experience in using English Vocabulary Game App.

The benefit of this research is intended for fostering the students, teachers, and the researcher herself in creating, developing, and expanding the English learning using interactive teaching media. Below are the following benefits:

- 1) Fostering motivation for the students to learn English vocabulary through a better and fun way so that they can have better understanding in English vocabulary acquisition.
- 2) Empowering the English teachers through Infinity Vocabulary Game App which can be a valuable helping tool to facilitate and deliver more engaging and effective approach in teaching English vocabulary for grade 5 primary students.
- 3) For the researcher and educators, this research hopefully can be useful for others who are interested in crafting and developing a meaningful and profound learning experience through interactive teaching media. Hopefully, it can bring a positive transformation and contribution to education, especially English as the second language.

1.6 Product Specification and Description

The product which is made by the researcher is a vocabulary game app that

developed from Godot Game Engine 4.2. This app can be accessed through Windows, Linux or Mac. The application name is Infinity. Meanwhile, Infinity itself contains 3 philosophical meanings. First, the researcher hopes that it will be an infinite learning and motivation for the students and the researcher herself. Second, the questions in the quizzes of Infinity game will be provided as infinite, the researcher can upload more questions adjusting to the students' need and curriculum anytime. Third, the main character will not be dead if the player is not willing to give up.

Infinity is a 2D platformer game, which consists of one main character named Foxy. The theme of this game is an adventure, whereas the player needs to assist Foxy to go back home. Along the journey the player needs to crack out the challenges and obstacles for Foxy. Those challenges are types of quizzes that the students need to answer until they are completely correct. Otherwise, the player cannot proceed to submit the quiz and continue to the next level. The obstacles in this game are the player needs to be very careful in order not to fall into the valley, otherwise, they need to repeat some of the journey once more. Therefore, it is expected that this repetition will become a drill for the students to retain new vocabularies unconsciously. The player can get some points through collecting diamonds and destroying the enemies by jumping on them. This game consists of three levels and at the end of the level the player will meet with the enemy boss which hopefully can bring the player to a sense of completion of a mission.

The content of the app is adjusted according to the Merdeka curriculum of grade 5 English lesson that is applied currently at SDN Sewan Kebon. The available topics are about body parts, animals, and degree of comparison. The body parts are

presented in level one, where the students can listen and see the picture of body parts prior doing the quiz such as letter scramble, drag and drop and memory game related to the body parts. In level two, the content is about animals, prior doing the quizzes the students can click to listen and read about the farm and wild animals. The students will fill in some questions related to the animals. In level three, the review is about comparison, the students will have multiple choice quiz and words arrangement quiz in this level. The students must fill them up correctly otherwise they will remain stuck on the current section.

1.7 Research Writing Structure

This research is divided into five chapters, each focusing on the specific aspects of the topic that each has a purpose. In chapter one, the researcher will focus on the research background to analyze the problems in learning English and finds out basic needs of English learning for the students in grade 5 SDN Sewan Kebon. Some of the problems that arises are, once a week meeting schedule considered insufficient time to practice, less exposure to practice English involving technology or interactive media learning, and limited basic English vocabulary that the students have becoming an initiation for the researcher to conduct this research. The researcher also presents the formulation and limitation of the problem, the purpose, and benefits of the research.

In chapter two, the researcher will compile the theoretical framework in this study. Several theories related to research development, cognitive approach on language learning, English vocabulary, e-learning and gamification models will be discussed. Additionally, the researcher will also present previous research and

conclude with a conceptual framework.

In chapter three, the researcher will provide a detailed description of the research methodology in this study. The research was conducted SDN Sewan Kebon from October 2023 to May 2024. The research process involved 66 students. Several experts were also involved in this research, including three experts for instruments validation. Data collection utilized techniques such as observation, interviews, pretest and posttest, and class experiments.

In chapter four, the researcher will present an overview of the product development process and the results of expert validation, and evaluation tests. The product development process was initiated after the researcher analyzed the existing needs of the students in grade 5 SDN Sewan Kebon. Subsequently, the researcher formulated the learning flow design, which is based on curriculum Merdeka, game app requirement, and required assets to build the game app. This interactive vocabulary game app is a 2D platformer game which has an adventure theme that consists of several vocabulary quizzes in it. The product testing that is done by experts will gather some feedback and suggestions regarding the development. This feedback and suggestions serve as the basis for the researcher in the product improvement process.

In chapter five, the researcher will discuss the significance of the research findings related to the identified problem formulation. Additionally, conclusions will be drawn and suggestions for further study will be presented.