

CHAPTER I

INTRODUCTION

This chapter elaborates on the background of the study, research questions, research purposes, research scope, research significances, the framework of thinking, hypothesis, and previous researches.

A. Background of study

Vocabulary is the foundation of effective communication. Its enrichment is central to the development of higher-order thinking skills as it facilitates deeper understanding, critical analysis, and the ability to synthesize complex information (August & Shanahan, 2006). According to Endarto, Subekti, Kristen & Wacana (2020), vocabulary is one of the most basic and important pillars in mastering English. As one accumulates more words, proficiency in a language naturally improves. Therefore, it is advisable for students to begin their journey into language acquisition as vocabulary serves as the fundamental gateway to initiating the study of a new language.

The acquisition of a rich vocabulary plays an essential role in English language learning, serving as the foundation for proficient communication and cognitive development. Extensive research highlights this essential link as (Xue & Sun, 2022) emphasize that "a rich vocabulary is the cornerstone of both receptive and productive language skills," highlighting its significance in both comprehension and expression. Furthermore, the work of (Webb & Nation, 2019) demonstrates a positive correlation between vocabulary size and academic achievement, critical thinking skills, and reading comprehension. This suggests that expanding vocabulary range extends beyond simple word accumulation, developing intellectual growth and enhancing the ability to navigate complex academic discourse. The process of vocabulary acquisition, as Schmitt (2000) suggests, is most effective through a combination of "incidental exposure and conscious learning strategies," supporting for both involvement in meaningful contexts and careful vocabulary study.

Vocabulary stands out as a crucial aspect of language, particularly in the context of English communication. Insufficient vocabulary hinders comprehension of others' speech. The acquisition and expansion of vocabulary are essential to enhance the four language skills: listening, speaking, reading, and writing (Saputri, 2018).

During observations at SMA Bina Muda Cicalengka, particularly in the eleven-grade language class, it was noted that a considerable number of students exhibited a lack of proficiency in English vocabulary. One of the students' problems in English vocabulary consist of low student's motivation, difficult to spell it, lack of proficiency in English vocabulary and students fear making mistakes in learning vocabulary. These are caused by monotonous English teaching approaches and monotonous teaching in using media. The lack of using media is the dominant cases on students' problem in learning vocabulary. U-Dictionary realization raised after administering a comprehension test that assessed their understanding of English vocabulary. The test involved questioning students about the vocabulary associated with various classroom objects like tables, chairs, windows, roofs, chalkboards, and others. Within the class, only a small fraction of students was able to respond correctly to the questions. This prompted consideration of strategies to improve the student's grasp of English vocabulary.

It was recognized that effective vocabulary learning requires the use of a dictionary, serving as a tool for comprehending foreign language vocabulary. While some students in the classroom diligently brought physical dictionaries as part of their English learning preparation, their utility often encountered limitations. As Schmitt (2000) observes that the weighty nature of physical dictionaries often burdens the momentum of language learning, highlighting the time-consuming nature of flipping through pages alphabetically for each word. This resonates with Thornbury (2017) statement that "the time spent flipping through pages in a physical

dictionary can be better spent on engaging with the language itself.” This inefficiency motivates the proposal to introduce a mobile English dictionary as a research initiative to enhance the teaching and learning process. This mobile dictionary, presented in the form of an application, embodies the potential that Warschauer (2014) describes when he states that technology offers exciting opportunities to anticipate the barriers of vocabulary acquisition. Its user-friendliness and instant access align with Brown (2014) observation that “in today’s mobile-first world, learning tools like dictionaries should adapt to fit the way we access information.”

These limitations of traditional vocabulary acquisition methods through physical dictionaries are increasingly faded in the age of personalized learning, using technology such as mobile applications. Kern (2014) states that mobile apps have the potential to transform language learning by providing personalized, attractive, and accessible learning experiences. With that statement, the use of mobile dictionary would be helpful for students in acquiring vocabulary. One of the mobile applications that can be used is U-Dictionary, which stands as the evidence to this transformative vision. Its tailored vocabulary lists, pronunciation aids, and gamified elements provide to individual learning styles and preferences, making the way for a more effective and engaging engagement with language.

U-Dictionary serves as a word translator, offering a valuable resource for enhancing students’ vocabulary skills. Through the features provided by U-Dictionary, students have the opportunity to learn and address their language-related challenges effectively, making this application a valuable solution for students.

Numerous previous researchers have investigated into the utilization of the U-Dictionary application to bolster students’ vocabulary proficiency. As an example, Wulandari & Handayani (2019), undertook a study focusing on the application of U-Dictionary to enhance students’ speaking skills at SMA

1 Kepayang Kiri. In their research, the U-Dictionary application demonstrated a noteworthy impact on students' speaking proficiency. This was evident in the substantial difference observed in students' speaking skills before and after the treatment, wherein U-Dictionary was employed as a method for teaching speaking. Then,

Muslimawati, Dewi & Silfia (2021) who did research on students' perception toward learning vocabulary by using U-Dictionary application at the first-grade student of SMAN 3 Jambi. In her research U-Dictionary application played as the tool and media of learning. Using U-Dictionary application for vocabulary learning among first-grade students at SMAN 3 Jambi yields positive effects on English education. The U-Dictionary application has demonstrated its ability to capture students' interest, providing a more engaging alternative to conventional, potentially tedious learning methods. This assertion is substantiated by student interviews, revealing a keen interest in learning English through the U-Dictionary application. Muslimawati et. Al. (2021) state the U-Dictionary application proves versatile in educational settings, as it can be employed by teachers for instructing various language skills, including vocabulary, speaking, reading, writing, pronunciation, grammar, and different text types.

Therefore, this study aimed to investigate the disparity in students' vocabulary proficiency when instructed with and without the use of the U-Dictionary application. The focus of this research was on second-grade

students at SMA Bina Muda Cicalengka. Addressing the discerned gap in existing research, the researcher embarked on a study titled: "The Use of U-Dictionary as Mobile Learning Dictionary to Improve Student's English Vocabulary" for eleven-grade students at SMA Bina Muda Cicalengka school.

B. Research Questions

From the description above, this research is intended to answer the

following questions:

1. What is students' English vocabulary mastery before using U-Dictionary application?
2. What is students' English vocabulary mastery after using U-Dictionary application?
3. Does the use of U-Dictionary application improve the students' vocabulary mastery?

C. Research Purpose

From the research questions above, this study is aimed at obtaining the following purposes:

1. Finding out students' English vocabulary mastery before and after using U-Dictionary application.
2. Finding out the significance of U-Dictionary application on students' English vocabulary mastery.

D. Research Scope

This research is quantitative research. The method used in this study is pre-experimental research methods. Throughout the pre-experimental method of research, researcher study only one experimental group and provide intervention during the experiment.

The scope of the research focus on the use of U-Dictionary as a media to increase students' vocabulary mastery at SMA Bina Muda, in 2023/2024 academic year.

E. Research Significances

This research is expected to give significance both theoretically and practically.

In theory, this research benefits both educators and learners. For teachers, it has the potential to transform their classrooms into active spaces where learning is enjoyable, boosting engagement and fostering preferences for the subject. For students, it indicates a move away from

routine memorization and towards a practical approach that stimulates curiosity and passion for exploring language. Practically, it suggests the learning process that replaces monotonous drills with captivating activities and interactive tools that foster deeper understanding.

F. Conceptual Framework

There are three points to be discussed in this conceptual framework: vocabulary, media in learning, and dictionary.

First is about vocabulary. Vocabulary is one of the most important language components in learning English (Nation, 2001). Learning vocabulary can help students in studying English and support them in mastering the other language components. Hold that language comprehension and production will be hampered because of a lack of vocabulary (Thornbury, 2017). According to (Gushendra, 2017) Vocabulary constitutes the entirety of words that form a language. Prior to delving into the study of English skills, one must embark on learning vocabulary as the foundational step. Recognized as a pivotal element in language education, vocabulary holds significance throughout the language-learning process. Students are required to consistently acquire new words concurrently with learning language structures and practicing the sound system.

Hakim, Abidin & Bahari (2020) state that vocabulary a crucial language component, particularly in English, significantly influences all macro skills. Proficiency in vocabulary is paramount for individuals learning a language, as it is intricately connected not only to grammar but also to listening, speaking, writing, and reading. To gain a deeper understanding of the pivotal role vocabulary plays in language acquisition, it is essential to begin by examining the definition of vocabulary. He also mentioned that vocabulary, a key element in language, particularly in English, holds the potential to influence all macro skills. Proficiency in vocabulary is crucial for anyone learning a

language as it is intricately connected not only to grammar but also to listening, speaking, writing, and reading. To gain a deeper understanding of the pivotal role vocabulary plays in language learning, it is beneficial to first examine the definition of vocabulary.

It is believed that acquiring vocabulary is essential for Indonesian EFL students as this will help their understanding in English. A strong vocabulary mastery enables students to comprehend English texts, construct meaningful sentences, and engage in effective communication.

Second is about media in learning vocabulary. Media serves as a valuable tool to aid students in their studies, enhancing the effectiveness and efficiency of the teaching and learning process. Among the various media available, a dictionary stands out as a resource that can be utilized by both teachers and students during the teaching and learning process, as noted by Jeremy Harmer (2007). Language learning can be done through multimedia formats that present text, images, audio or animation. Mobile dictionary technology can be an alternative medium for language learning. There are many mobile applications that can be used to learn languages. Some applications require the availability of an internet network, but there are also several applications that can be accessed offline. One example of using a mobile dictionary is in learning to read by utilizing the audio feature in the mobile dictionary application, so students can learn how to pronounce something. vocabulary and sounding notes correctly. This is certainly much more efficient than using a conventional dictionary, where in its use, conventional dictionary users must first search for the vocabulary along with the page where the vocabulary is located.

Bawawa (2020) mentions that various media can assist teachers in effectively teaching English vocabulary and enhancing students' language skills. These tools include puppets, cartoon films, tape

recorders, color passing activities, songs, games, and more. Each of these resources provides diverse and engaging methods to facilitate vocabulary learning in students.

The use of technology such as mobile dictionaries can stimulate students' motivation in learning foreign languages (Rahimi & Miri, 2014). By using mobile dictionary technology, such as U-Dictionary, students can learn vocabulary that is relevant to the learning material. Absorbing vocabulary through mobile device applications is much more effective than learning it through other media.

U-Dictionary facilitates instant translations of texts, images, and even conversations in 108 languages, empowering learners to challenge any linguistic problems with confidence. This unified translation capability aligns with Luo and Yan's (2020) findings that mobile dictionaries with contextual translations promote independent learning and boost reading comprehension. Moreover, the voice translation feature, as Kim and Wang (2022) observe, significantly reduces anxiety and fosters confidence in spoken communication, transforming U-Dictionary into a valuable tool for real-world practice.

In this research, it is expected that the students use the U-Dictionary application as it is a tool for learning vocabulary, which is one of the essential components of language proficiency. Vocabulary is the set of words that a person knows and uses in a particular language. Vocabulary acquisition is the process of learning and remembering new words.

The reason why the writer chooses this application is because U-Dictionary has several features that can support students in learning English especially in listening. So, the advantages of U-Dictionary that can make learn English quickly are as follows:

- a) Translate Images with a Camera

The translation of English text displayed in any context can be achieved through the direct utilization of a camera. By scanning the text, the awkwardness of manual re-typing can be avoided and the matching meaning will appear in Indonesian. Mobile dictionary apps with simultaneous image translation features, like U-Dictionary's camera function, significantly decrease anxiety and frustration during language encounters by providing direct access to meaning in context, fostering independent learning and confidence (Chen & Guo, 2023).

b) Learn English from the Android Lockscreen

In addition to the capability of learning English through camera functionality, the installation of U-Dictionary on an Android device provides the opportunity to engage in direct English learning directly from the smartphone's lock screen. Consequently, each case of unlocking the screen offers immediate exposure to new English vocabulary for further learning. The combination of contextual vocabulary learning into everyday practices in U-Dictionary's lockscreen feature have been shown to increase vocabulary acquisition and improve memorization through repeated experience in advanced learning environments (Yang & Kim, 2022).

c) Play Games to Learn English

U-Dictionary, as a language-learning application, offers engaging games as a source to gain new vocabulary. The gamification of mobile dictionary apps like U-Dictionary, through features like vocabulary games and quizzes, has been found to significantly increase learner engagement and motivation, improving vocabulary retention and general language skill compared to traditional learning methods (Wang & Liu, 2021).

Third is about dictionary. A dictionary is among the first things a foreign language learner purchases and most language teachers believe

that dictionaries can assist the learning of vocabulary (Scholfield, 1997). Dictionaries give information on word derivation, meaning, spelling and pronunciation.

The functions of dictionary are essentially to define meaning of words, etymology of words, pronunciation, spelling, and translations. (Landau & Sidney I., 1984) specifically describes the essence of the dictionary for second language learners in these words: ESL dictionaries contain many of the features of foreign-language instructions such as providing detailed information on pronunciation, verb patterns, and collocations with some characteristics of children's dictionaries-definitions are expressed in simplified language and sometimes in a controlled vocabulary.

Dictionary can be helpful for student to knowing the meaning of word, pronunciation of word, and word spelling. Dr. Ece Sarigul (1998) state that a dictionary generally contains at least following information about each word which can be used by the foreign language learners such as word spelling, the standard pronunciation, definition to represent the word's one or more meanings, part of speech, example of sentence in which the word used, synonym, and antonym.

G. Hypothesis

Based on explanation above, the hypothesis can be formulated as follows:

1. Null Hypothesis (H0): The use of U-dictionary does not significantly improve students' ability in vocabulary at SMA Bina Muda Cicalengka.
2. Alternative Hypothesis (H1): The implementation of U-dictionary significantly improves students' ability in vocabulary at SMA Bina Muda Cicalengka.

H. Previous Researches

Several of the research has been conducted on vocabulary retention. First, an investigation by Wulandari & Handayani (2019), the use of U-Dictionary students' vocabulary. The descriptive method is utilized to do the investigation. It is used to characterize the object's status in light of a fact in the field. Based on the research findings and discussion, it is concluded that U-Dictionary has a positive or beneficial effect as a learning medium for teaching speaking, particularly in terms of improving the students' vocabulary. Throughout the research, the students acquired numerous vocabularies, including at least one hundred new words organized by category: noun, adjective, verb, and adverb. U-Dictionary can be a helpful tool for increasing kids' vocabulary. U-Dictionary is an English offline dictionary that every student in every grade can download. It is available through the playstore, an application that comes pre-installed on most Android phones. It is simple to use either to expand one's vocabulary or to enhance one's ability to pronounce English words, as U-Dictionary not only provides the definition of a word but also its spell. This research contributes by demonstrating the potential of U-Dictionary as a learning resource that can enhance students' vocabulary used in speaking, particularly through its accessible features and focus on both meaning and pronunciation.

Second, an investigation by Kayra (2024), This study investigates the effectiveness of mobile applications in enhancing English vocabulary acquisition among university students. It is based on a structured survey conducted on undergraduate students from various disciplines at a private university. The study examines the students' perceptions and usage patterns of mobile applications for learning English vocabulary. The findings indicate a strong preference for mobile apps over traditional learning methods. A significant number of students use these apps daily or at least weekly. The study emphasizes that mobile apps offer an easy and

efficient way for students to learn vocabulary flexibly. Features such as gamification and pronunciation assistance, when incorporated into mobile applications, are highly appreciated by the students. The study concludes that interactive elements with audio-visual effects significantly enhance learning engagement and effectiveness. This research contributes to the understanding of how university students learn vocabulary effectively by focusing on their preferred learning methods (mobile apps) and the features that enhance their experience. This can be valuable for developers of language learning apps and educators looking to incorporate technology into their teaching.

Third, an investigation by Fengyu (2023) This research paper explores the effects of different vocabulary learning methods on students' ability to apply vocabulary in English language learning. The study compares traditional methods like rote memorization and flashcards with modern methods such as contextual learning, technology-assisted learning, and multimodal strategies. The findings suggest that while traditional methods are effective for vocabulary retention, they often lack in facilitating practical vocabulary usage. Contextual learning stands out as a powerful strategy, encouraging active vocabulary application by immersing learners in real-life language situations. Technology-assisted methods improve pronunciation and provide immersive experiences, leading to better vocabulary application. Multimodal approaches, which combine various methods, offer a comprehensive solution, promoting both vocabulary recognition and active usage. The study concludes that a balanced approach that integrates both traditional and modern methods is necessary in language teaching. The incorporation of technology and real-life contexts into language education enhances students' ability to effectively apply vocabulary, thereby bridging the gap between knowledge and applications. This research contributes offers valuable insights into effective vocabulary learning methods in English language education,

emphasizing the importance of bridging the gap between memorization and practical application.

Fourth, an investigation by Tuahman Sipayung, Sianturi, Made, Rohayati & Indah (2021), comparison of translation techniques by Google Translate and U-Dictionary. This research applied a qualitative descriptive research design due to the characteristic of the data which are pairs of translation (from English to Indonesia) which is recorded in two machine translations, Google Translate and U-Dictionary. This research aims to bridge an existing gap in the field of computational linguistics by utilizing linguistic theory as a benchmark for evaluating machine translation. It addresses the scarcity of studies on U-Dictionary in comparison to its well-established counterpart, Google Translate, which has been in existence for over a decade. The findings of this study reveal that U-Dictionary employs a more diverse range of translation techniques than Google Translate and offers a broader spectrum of functions that extend beyond mere translations, suggesting its potential for various purposes. Consequently, the researchers cautiously recommend U-Dictionary for users. However, both machine translations predominantly favor literal translation techniques, indicating a strong inclination towards the source language rather than the target language. This bias abandoned situational, contextual meaning, or pragmatic equivalence in translation. The study highlights the need for further development of the neuro corpus to enhance both U-Dictionary and Google Translate, enabling these machines to be more target language-oriented. This contribution serves as guidance for the designers of these translation tools.

Fifth, an investigation by Li (2022), this review investigates the effectiveness of mobile applications on vocabulary learning, focusing on four aspects: vocabulary learning performance, learning motivation, self-confidence, and autonomous learning. The review critically examines

thirty studies conducted between 2014 and 2022. The findings suggest that mobile applications are effective in enhancing learners' vocabulary acquisition and retention, improving motivation, boosting self-confidence, and supporting autonomous learning. Factors such as the type of mobile application, teacher supervision, and differences in age and gender should be considered when integrating mobile applications into teaching and learning. The study concludes that mobile applications are a valuable tool in vocabulary learning and teaching. However, it also highlights the need for further research to explore the effectiveness of mobile applications on vocabulary teaching and the best ways to integrate them into the language classroom. This research contributes is a comprehensive review that strengthens the understanding of mobile apps' potential in vocabulary learning by considering various factors and highlighting areas for future research.

Sixth, an investigation by Maulia & Amin (2023) the objective of this research was to assess the impact of using the U-Dictionary application on students' pronunciation mastery at the eleventh grade of SMK Negeri 1 Perbaungan. The study employed a quantitative method with a quasi-experimental design, focusing on class XI students of SMK Negeri 1 Perbaungan. The experimental group comprised 21 students from class XI TKJ 1, while the control group included 21 students from class XI TKJ 3, selected randomly. Data were collected through pre-tests and post-tests, assessing students' pronunciation mastery, and analyzed using a t-test. The results, with $t\text{-test} = 8.095$, exceeded the critical t-table value ($t\text{-table}$ with $df = 40$, two-tailed test, significance of $5\% = 2.021$). This indicates that the null hypothesis (H_0) was rejected, and the alternative hypothesis (H_a) was accepted. The evaluation of students' pronunciation mastery demonstrated that more students in the experimental group achieved a higher level of proficiency (predicate 4 - good) on vowel, diphthong, and consonant sounds compared to the control group. In contrast, the control group had

more students with predicates 3 (average) and 2 (poor) on these pronunciation elements. In conclusion, the use of the U-Dictionary application significantly influenced students' pronunciation mastery at the eleventh grade of SMK Negeri 1 Perbaungan. This research contributes to the understanding of U-Dictionary's effectiveness by focusing on pronunciation and utilizing a controlled experiment to demonstrate its impact.

Therefore, the conclusion of this research differs from previous studies in its focus. This study specifically centers on the impact of the u-dictionary application as a mobile-based dictionary and its application in the development of students' vocabulary by using pre-experimental study as the novelty of this study from previous researches.

