

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents and discusses *definitions of vocabulary and teaching methods*. Also, the *Duolingo Application*, benefits and drawbacks of the Duolingo application, integrating Duolingo on students' vocabulary mastery, and previous related research hypotheses.

2.1 Vocabulary

2.1.1 The Nature of Vocabulary

According to (Josafat Gultom et al., 2021) Vocabulary is one of the essential aspects for successful second language use because, without an extensive vocabulary, one will not be able to use the structures and functions he or she may learn for comprehensive communication. Mastering vocabulary is crucial when acquiring a new language. Inadequate vocabulary knowledge hinders students from effectively expressing themselves and comprehending the teacher's instructions. Nevertheless, students can enhance their learning objectives by honing their speaking, listening, reading, and writing abilities. Proficiency in vocabulary facilitates effective communication and expression of knowledge and ideas among students. Thus, a strong grasp of vocabulary enables individuals to assess their English language development and personal requirements.

In addition, vocabulary plays an important role in everyday human life. Vocabulary is a vital element of language because one's thoughts can only be understood clearly by others if what is expressed using vocabulary. (Najwa

Lahmady, 2023). Mastering vocabulary is crucial for students to effectively engage in discussions, comprehend lesson content, and stay informed about global news. Yet, many individuals struggle to begin the learning process and are unsure which language-learning apps to use. As educators, it is essential to introduce creative media that will inspire students to enjoy learning during their study sessions. Utilizing media can greatly enhance the delivery of educational material and create an interactive atmosphere in the classroom. This approach will help students see the fun and interesting side of expanding their vocabulary for English language acquisition.

According to the definition, vocabulary plays a crucial role in language acquisition. Proficiency in vocabulary enables students to articulate their thoughts, structure sentences during conversations, and comprehend the educational materials presented by their teachers. Furthermore, students acquire vocabulary at a young age, particularly when they first start learning English. Mastering vocabulary is essential for developing a new language. It equips students with the necessary tools to grasp the subject matter and effectively utilize language skills to communicate fluently in English, as well as to listen, write, and read with ease.

2.2 Duolingo Application

2.2.1 Definition of Duolingo

Duolingo was developed in 2011 by Luis von Ahn dan Severin Hacker. Duolingo was a gamification app. Duolingo is a free application that can be accessed on a handheld device and a PC. According to (Miftakh & Yulianti, 2021)

Duolingo has many features that can help learners easily learn a language, such as listing words for everyday, discussing with other users so the learners can share, the Lingot store, and immersion for more advanced learners.

According to (Prabawati et al., 2021) Media is a tool for teaching and learning, everything that can stimulate students' minds, feelings, attention, and ability or skill to encourage the learning process. Duolingo as media learning helps students improve vocabulary mastery. Duolingo is both playful and built on serious learning science. (Freeman et al., 2023). The Duolingo app includes an element of gamification. Gamification refers to applying game dynamics, mechanics, and frameworks to non-game settings. (Stott & Neustaedter, 2013). As a learning tool, Duolingo helps students comprehend and quickly absorb new vocabulary, piques their interest in and enjoyment of the learning process.

The purpose of Duolingo is to make it a user application for easier understanding of learning vocabulary and its use of it. The addition of Duolingo in the learning media takes place, and the user will be known by learning with Duolingo, which adds skills for mastering vocabulary. They are using Duolingo as a learning media that facilitates students and teachers in improving learning strategies to assist students in mastering vocabulary. Applying Duolingo to added learning media can help students master a new language and not make them bored in learning activities because Duolingo applies gamification elements in its application.

2.2.2 Characteristics of the Duolingo Application

With its many features, Duolingo is an internet-based language learning tool that makes learning new languages easier. The features offered by the Duolingo application are described as follows:

1. **Achievement**, upon completing a lesson that has been diligently worked on, students or users are granted the privilege of accessing a Duolingo feature.



Figure 2.1 Achievement

2. **Lingot**, where users receive "Lingot" after finishing levels and learning activities, and the possibility of receiving bonus tasks.



Figure 2.2 Lingots

3. **The Daily Goal** is an expression of gratitude to users for reaching their daily objectives. The Duolingo program encourages users to learn the next lesson, rewarding them with sounds and distinctive character pops.

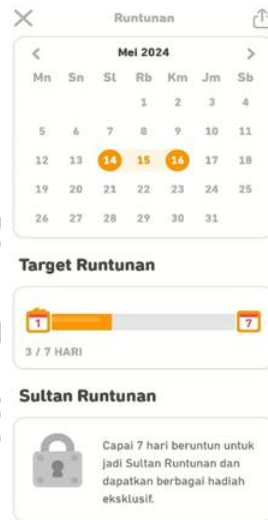


Figure 2.3 Daily Goal

4. **Club User Networking** is a feature that allows students to communicate with other users; users can communicate, share with other users, and discuss language learning. It can also compete again for (10) XP and see its friends in the score.



Figure 2.4 Score Board

5. **Crown Levels: Each skill** is "Crown Level". After the user completes the skill, the user can do it, the user gets a crown and gains a new skill.

The Duolingo app also provides learners with different exercises in a lesson, such as:

- 1) Vocabulary, where users see a picture and four pictures, are shown answer options and choose the correct answer.
- 2) Utterance, which means when the user repeats or says the sentence he heard.
- 3) Listening, where the user hears an audio clip of the word or phrase and spells it correctly.
- 4) In translation, the user is asked to translate the word or phrase into the language they want to know or learn

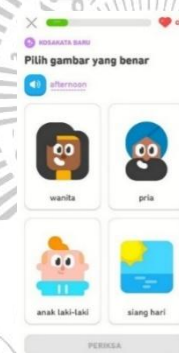


Figure 2.5 Vocabulary



TAK BISA BICARA SEKARANG

Figure 2. 6 Listening



Figure 2. 6 Pronunciation



Figure 2. 8 Translating

2.2.3 Teaching Vocabulary Using Duolingo

The rate from Duolingo makes a difference in understudies creating their lexicon information around words in English, understudies must have the capacity and know how to hone learning procedures in building a lexicon. It can be said that it has at least three advantageous points of interest. To begin with, Duolingo makes a difference in understudies incrementing their inspiration to memorize, and utilizing the app keeps understudies snared and is more fun. Moment, Duolingo can offer assistance in finding modern words at each stage of the workout as understudies can be locked in by seeing the energizing and broad highlights as they

learn the contemporary lexicon. In expansion, understudies can use the Duolingo application to understand the word's meaning.

Duolingo can be played independently after the lesson conveyed by an educator. There are a few systematic exercises for understudies to memorize unused lexicons. The educator can select and suit the fabric based on the government educational modules within the lesson. According to Mulya & Refnaldi (2016), there are several steps to teach vocabulary with the use of the Duolingo application:

- a) Warm-up exercise: After entering the classroom, students use their smartphones to practice Duolingo. This can prevent interruptions when students arrive and help the classroom become calm by allowing the students to rehearse before the teaching session begins.
- b) A power practice session is an automatic quiz consisting of ten questions based on the class participants' average progress. If students finish early, the teacher can use it as a fun standby or review exercise. Students can play as a class or in teams, or the teacher can challenge them to a competition. The game is projected onto the board.
- c) Blended learning section: class: Teachers can use the Duolingo app to enhance in-person instruction during the class. Teachers can use the Duolingo app in conjunction with in-person classroom instruction. Because they can study independently, students gain from this online platform, and professors can spend more time working one-on-one or in small groups. Instructors can offer partnered conversation practice and small group instruction based on the needs

of their students. Teachers can choose appropriate groups and topics using data from the Duolingo application.

To assist the readers in getting the work of each portion of the Duolingo application, a few steps can be conducted within the classroom learning exercises as follows:

- a) First, students can download the Duolingo app on Google Play or Apple Store and install it with the Android/iOS operating system to use it. Users can create an account or access activities without an account. However, they can save their learning progress by creating an account.



Figure 2. 7 Wallpaper

Figure 2. 8 Login account

- b) Moreover, students can select the English language they need to learn after making an account and utilize it quickly.

- c) Finally, students can advance their learning through lessons or units. Each lesson comprises 10 or 20 questions centering on progressing lexicon through articulation aptitudes, translation, listening, and vocabulary information. Upon effective completion of each lesson, it will level up to another lesson and gain a crown upon completion of the final unit



Figure 2. 9 Choose a language

Within the classroom, an educator can begin learning and give material utilizing open English and how to utilize the Duolingo application. At that point, understudies are asked to decipher a few words' implications. So, to begin with, the students can begin utilizing the Duolingo application, and they can select a theme that has been given, or the students can openly select their point.

2.3 Teaching Method

2.3.1 Definition of Teaching Method

A basic methodology to reinforce the victory of dialect direction. In learning, the strategy procedure is basic to control the circumstances within the lesson. In learning something, the learning procedure is the key to keeping up the

learning course. In this manner, teachers have to select learning procedures fitting for students.

According (Giorgdze & Dgebuadze, 2017) A teaching method is formed in the teaching process through the interaction between the teacher and the learner. The teacher incorporates a crucial part of the learning planning. As a facilitator and chief, I can deliver a circumstance to back student improvements. Teaching methods are many and varied and could be used in different ways, considering, among others, the age of the learners, body configuration, or the physique of learners (able or disabled learners) (Ebiere Dorgu, 2015). Teachers can consider learning techniques suitable for the material, instructing teachers to make understudies effective, powerful, solid, effective, and motivated to advance students' understanding.

Based on the conclusion definition, the teaching method could be a direction and learning handle that produces passing on data less requesting to induce it to get the student's learning to prepare and makes the teachers utilize distinctively distinctive inquisitive learning strategies to make understudies interested and appreciate the learning handle since distinctive learning strategies are associated on the teaching plan.

2.4 Discovery Learning

2.4.1 Definition of Discovery Learning

Jerome Bruner founded Discovery Learning in the 1960s. According to (Takaya, 2008) Bruner seemed to think that academic disciplines or topics tend to arouse curiosity in human beings in general, including children. Discovery learning

involves putting students in various situations, questions, or activities that guide them to discover the concept independently. (Hidayati et al., 2018). Learners are at the center of the examination. It develops basic considering, imaginative considering, making concepts and benchmarks, and trying to find information to contribute to students' data.

The part of the teacher within the discovery setting is that of a learning coach and facilitator. When considering how to choose learning methods and capabilities for use in instructing and learning exercises, this makes a difference when the teachers come up with thoughts. According to Pongpalilu (2023), Discovery learning provides opportunities for students to participate actively in building the knowledge they will acquire. Students become the focal point of the learning process through discovery learning. They utilize basic considerations, make unique arrangements for issues, and search for information from different sources for all advantaged kids. Discovery learning consists of preparatory steps and implementation. Therefore, the discovery learning process can be concluded as the intellectual potential, the values of extrinsic to intrinsic, the long memories, and the heuristic learning. (Muliati & Syam, 2020). One objective of the discovery learning approach is to develop critical thinking skills, the ability to solve issues based on prior knowledge, and the ability to evaluate students' inventiveness and comprehension in learning activities. From the discourse explanation, discovery learning has a positive effect on students. Students can sharpen their learning aptitudes and increase their knowledge by learning from different sources. The teacher acts as a direct facilitator to assist students in finding and creating learning.

2.4.2 The Steps of Discovery Learning Implementation in Class

Implementing discovery learning in the classroom can increase students' engagement in learning English, particularly in mastering grammar. The following are the most typical steps in implementing discovery learning in the school. (Mufida et al., 2015) :

1. Stimulation

Following the teacher's introduction of the lesson and class activities, the instructor gives the pupils a stimulating task: observing objects in their immediate environment and encouraging reflection on what they have seen.

2. Problem Statement

The students can recognize the learning materials' problems and investigate the solutions using the available learning resources.

3. Data Collection

Djamarah in Irmayanti states that they can search the data by observing the objects, interviewing with resources, doing an experiment alone, and others (1996:22).

4. Data Processing

In Syah's opinion in Irmayanti, the learners have to process the data They have gotten through interviews, observation, and other methods (2004:244).

5. Verification

Students check if their hypothesis is valid at this point. This needs to be connected to the information gathered from the data.

6. Generalization

Djamarah in Irmayanti, on the verification result, the learners will conclude the study (1996:23). Generalization is the last step. If the learners have generalized, they have been the master of material from someone's experience.

2.5 Previous Study

Some research has been conducted related to this study. The first is a thesis by Addal Muddin (2018) titled "THE USE OF DUOLINGO TO IMPROVE STUDENTS' VOCABULARY". They discussed how to make the students excited and interested in learning and practicing English. Students' understanding of vocabulary has improved, as seen by the post-test mean (59.75>44.75), which is greater than the pre-test mean. There has been a 33.5% improvement. The result has had a good impact on the students. Students' capacity to master vocabulary is enhanced when Duolingo is used to help with it.

The second research in the Journal of Sarita D. Matra (2020) is titled "Duolingo Applications as Vocabulary Learning Tools". The result was that the pupils were thrilled and gained a renewed enthusiasm for studying English once the Duolingo application was used for teaching and learning. According to the study's findings, children's test scores rose considerably. The results show that a P-value < 0.05 indicates significant differences between pre-test and post-test scores. This means that Duolingo, as a media learning tool, pushes students to push their improved vocabulary mastery to the next level.

The last research in the journal by Pangkuh Ajisoko (2020) is titled "The Use of Duolingo Apps to Improve English Vocabulary Learning". The post-test

mean score (57.45>79.15) is higher than the pre-test score, indicating an improvement in the vocabulary mastery of the learners. The improvement's significance is 0.687. The outcome demonstrated that students' scores significantly improved before and after using Duolingo frequently. As a learning media, Duolingo has a positive impact on students, namely being able to make students motivated to learn, understand the material more easily, spread the material to practice the material, avoid boredom in learning, and practice and easily remember the material in everyday life.

Accordingly, there are some variations in the research studies' findings. The impact of using the integrated Duolingo program as a teaching tool in the classroom is the main topic of this study.

2.5.1 Research Hypothesis

Based on the explanation of the theory and research aims, it is possible to hypothesize that the Duolingo application has a considerable effect on students' vocabulary.