

**THE EFFECTIVENESS OF USING DUOLINGO
APPLICATION IN IMPROVING STUDENTS' ENGLISH
VOCABULARY: A STUDY AT HASANUDDIN UNIVERSITY
BATCH 2021**



A THESIS

Submitted to the Faculty of Cultural Sciences Hasanuddin University
as Partial Requirements to Obtain Bachelor Degree in
English Literature Study Program

APRILIA DWI SETIAWATI

F041191124

**ENGLISH LITERATURE STUDY PROGRAM
FACULTY OF CULTURAL SCIENCES
HASANUDDIN UNIVERSITY**

2023

ENGLISH STUDY PROGRAM
FACULTY OF CULTURAL SCIENCES
HASANUDDIN UNIVERSITY

LEGITIMATION

THESIS

THE EFFECTIVENESS OF USING DUOLINGO APPLICATION IN
IMPROVING STUDENT'S ENGLISH VOCABULARY: A STUDY AT
HASANUDDIN UNIVERSITY BATCH 2021

BY

APRILIA DWI SETIAWATI

Student ID Number: F041191124

It has been examined before the Board Thesis Examination on March 2023 and is
declare to have fulfilled the requirements.

Approved By
Board of Supervisors

Chairman

Dra. Nasmilah, M.Hum. Ph.D
NIP. 196311031988112001

Secretary

Hidayatullah Yunus, S.S., M.Tesol
NIP. 199210072022043000

Dean Faculty of Cultural Sciences

Head of English Literature Department



Prof. Dr. Akin Duli, M.A.
NIP. 196407161991031010

Dra. Nasmilah, M.Hum. Ph.D
NIP. 196311031988112001

**ENGLISH LITERATURE STUDY PROGRAM
FACULTY OF CULTURAL SCIENCES
HASANUDDIN UNIVERSITY**

AGREEMENT

On....., 10.. March 2023, the Board of Thesis Examination has kindly approved a thesis by Aprilia Dwi Setiawati (F041191124) entitled *The Effectiveness of Using Duolingo Application in Improving Student's English Vocabulary: A Study at Hasanuddin University Batch 2021*: submitted in fulfillment one of the requirements to obtain Sarjana Degree in English Literature Study Program, Faculty of Cultural Sciences, Hasanuddin University.

UNIVERSITAS HASANUDDIN

Makassar, 13th March 2023

BOARD OF THESIS EXAMINATION

- | | | |
|--|---------------|---------|
| 1. Dra. Nasmilah, M.Hum, Ph.D. | Chairman | (.....) |
| 2. Hidayatullah Yunus, S.S., M.Tesol | Secretary | (.....) |
| 3. Dr. Abidin Pammu, M.A., Dipl. TESOL | Examiner I | (.....) |
| 4. Dra. Marleiny Radjuni, M.Ed | Examiner II | (.....) |
| 5. Dra. Nasmilah, M.Hum, Ph.D. | Supervisor I | (.....) |
| 6. Hidayatullah Yunus, S.S., M.Tesol | Supervisor II | (.....) |

ENGLISH LITERATURE STUDY PROGRAM

FACULTY OF CULTURAL SCIENCES

HASANUDDIN UNIVERSITY

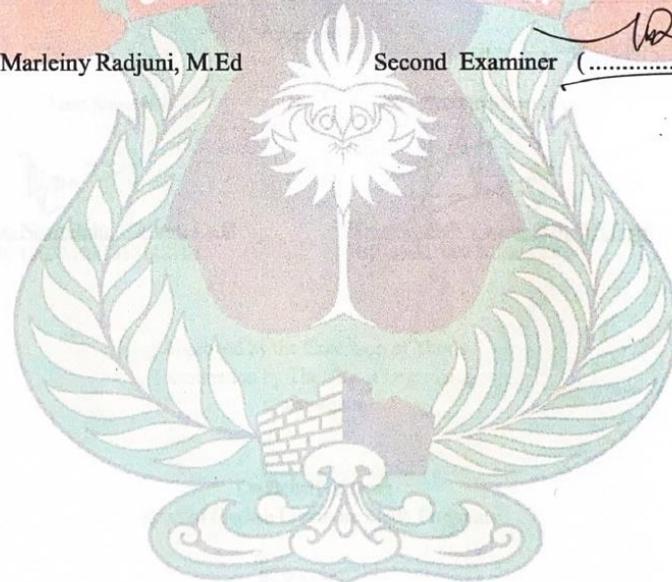
DECLARATION

The thesis by Aprilia Dwi Setiawati (F041191124) entitled *The Effectiveness of Using Duolingo Application in Improving Student's English Vocabulary: A Study at Hasanuddin University Batch 2021* has been revised as advised during the examination on March 2023 and is approved by the Board of Undergraduate

Thesis Examiners:

1. Dr. Abidin Pammu, M.A., Dipl.TESOL First Examiner (.....)

2. Dra. Marleiny Radjuni, M.Ed Second Examiner (.....)



**ENGLISH LITERATURE STUDY PROGRAM
FACULTY OF CULTURAL SCIENCES
HASANUDDIN UNIVERSITY**

APPROVAL FORM

With reference to the letter of the dean of Faculty of Cultural Sciences Hasanuddin University No.7688/UN.4.9.7/TD.06/2022 regarding supervision, we hereby confirm to approve the undergraduate thesis draft by Aprilia Dwi Setiawati (F041191124) to be examined at the English Literature Study Program of Faculty of Cultural Sciences.

Makassar, 27 February, 2023

Approved by

First Supervisor

Dra. Nasmilah, M.Hum. Ph.D
NIP. 196311031988112001

Second Supervisor

Hidayatullah Yunus, S.S., M.Tesol
NIP. 199210072022043000

Approved by the Execution of Thesis
Examination by The Thesis Organizing
Committees

On Behalf of Dean
Head of English Literature Study Program

Dra. Nasmilah, M.Hum. Ph.D
NIP. 196311031988112001

STATEMENT OF ORIGINALITY

The undersigned;

Name : Aprilia Dwi Setiawati
ID Number : F041191124
Department : English Literature
Judul Skripsi : **The Effectiveness Of Using Duolingo Application In Improving Students' English Vocabulary At Hasanuddin University Batch 2021**

Hereby, the writer declares that this thesis is written by herself. This thesis does not contain any materials which have been published by other people, and it does not cite other people's ideas except the quotations and references.

Makassar, 14th March 2023

The Author,



Aprilia Dwi Setiawati

NIM. F041191124

ACKNOWLEDGEMENT

First of all, the author would like to say Alhamdulillah and thank Allah SWT. who has given mercy and blessing so that the author can finished the thesis entitled *The Effectiveness of Using Duolingo Application in Improving Student's English Vocabulary: A Study at Hasanuddin University Batch 2021*. The author realizes that in the process of writing this thesis encountered many obstacles. But with the help, guidance and cooperation from some parties, the obstacles faced can be overcome. So that the author would like to express her thanks to:

1. **Dra. Nasmilah, M.Hum, Ph.D** as author's first supervisor and **Hidayatullah Yunus, S.S., M.Tesol** as author's second supervisor who helped, guided and gave author directions and suggestions so that author can finished her thesis well.
2. The author's mother, **Syamsunarti Samad**, and author's brother, **Anton Gunawan Setia Budi**, who gave endless support, hope and prayers to the author's study journey since the beginning. Thank you for being patient with the author's insanity until now.
3. Author's cousins, **Imma, Yuli, Zainal, Pipa, and Alwi**. Cousins who gave author the best assistance in the successful experimentation of author's thesis. Thank you for your kind help and cooperation. Love you, guys.
4. All faculty and department staff who facilitated the author with the administration matters.

5. Special thanks to author's friend, **Putri Arini** who always be there when author need help in all situations and conditions. Thank you for willing to walk together from the beginning of college to the completion of this thesis. It was so great to be your friend.
6. Batch 2021 Hasanuddin University students who wanted to participate in author's treatment for a week. Without them the author cannot be able to complete the author's thesis.
7. One of the special people the author's life, **Ivan**, who is one of author's motivators to finish the author's thesis on time. Thank you for the short time that has been given to the author. Hopefully we can meet with the completion of author's thesis.
8. Last but not least, I want to thank me. I want to thank me for believeing in my plan, thank me for all the hard work, and thank me for never quitting. Dear my self, life is hard and I appreciate you a lot for not giving up on it.

TABLE OF CONTENT

LEGITIMATION	ii
AGREEMENT	iii
DECLARATION	iv
APPROVAL FORM	v
STATEMENT OF ORIGINALLY	vi
ACKNOWLEDGEMENT	vii
TABLE OF CONTENT	viii
LIST OF TABLE	xi
ABSTRACT	xii
ABSTRAK	xiii
CHAPTER I INTRODUCTION	1
A. Background of The Study	1
B. Identification of Problem	3
C. Scope of Problem	3
D. Research Question.....	3
E. Objectives of the study.....	4
F. Significance of the Study	4
CHAPTER II LITERATURE REVIEW.....	5
A. Previous Study	5
B. Theoretical Background	7
1. Duolingo	7
2. Vocabulary	10
3. The Importance of mastering vocabulary in Language Learning	12
4. Learning English Using Technology	13
C. Theoretical Framework	14
CHAPTER III RESEARCH METHODOLOGY	16

A.	Research Design	16
B.	Population and Sample	17
C.	Method of Collecting Data	17
1.	Pre-Test	17
2.	Treatment.....	18
3.	Post-Test.....	19
4.	Questionnaire.....	19
D.	Data Analysis Method	20
CHAPTER IV FINDINGS AND DISCUSSIONS		23
A.	Findings.....	23
1.	Data Presentation and Analysis Pre-Test.....	23
2.	Data Presentation and Analysys Post-Test	25
3.	Comparison Between Pre-Test and Post-Test Result	27
4.	Analysis of Data from Questionnaire	30
B.	Discussion	42
1.	The different of Score Result on Students' Vocabulary Mastery.....	43
2.	The Result of Questionnaire on Students' Perspectives Regarding Duolingo in Improving English Vocabulary.....	44
CHAPTER V CONCLUSION AND SUGGESTION		46
A.	Conclusion	46
B.	Suggestion.....	47
BIBLIOGRAPHY		50
APPENDICES		53

LIST OF TABLE

Table 1. Range score for test.....	21
Table 2. Data Presentation of pre-test	24
Table 3. Data Presentation of post-test.....	25
Table 4. Data comparison between pre-test & pre test result.....	27
Table 5. Comparison mean of pre-test & pre test result.....	29
Table 6 Questionnaire result from statement 1	30
Table 7 Questionnaire result from statement 2	31
Table 8 Questionnaire result from statement 3	32
Table 9 Questionnaire result from statement 4	32
Table 10 Questionnaire result from statement 5	33
Table 11 Questionnaire result from statement 6	34
Table 12 Questionnaire result from statement 7	35
Table 13 Questionnaire result from statement 8	36
Table 14 Questionnaire result from statement 9	37
Table 15 Questionnaire result from statement 10	38
Table 16 Questionnaire result from statement 11	38
Table 17 Questionnaire result from statement 12	39
Table 18 Questionnaire result from statement 13	40
Table 19 Questionnaire result from statement 14	41

ABSTRACT

This research aims to analyze the effectiveness of the Duolingo application in increasing students' English vocabulary. This research was conducted using treatment for 6 days. The subjects of this study were Hasanuddin University students of batch 2021, they are 20 students who were interested in taking part in the treatment. The purpose of this study was to see the increase in students' English vocabulary after learning English using Duolingo and to find out how students' views of Duolingo as a language learning application in increasing English vocabulary. This research was conducted using two methods, each consisting of test scores and surveys. Data is collected through quantitative data. The results of this study indicate that the students' English vocabulary has increased. The average score of the pre-test was 58.75 and the post-test was 79. This indicated that the students' scores had increased from the pre-test to the post-test. The difference between the two tests is significant with a value of 20.25. From the data it can be concluded that there is a striking difference between student achievement before and after receiving treatment. In addition, this is more effective and interesting than conventional teaching in teaching English about vocabulary to students, especially students who have below average English skills.

Keyword: Duolingo, Vocabulary, Technology, English Language Learning

ABSTRAK

Penelitian ini bertujuan untuk menganalisis keefektifan aplikasi Duolingo dalam meningkatkan kosakata bahasa Inggris siswa. Penelitian ini dilakukan dengan menggunakan perlakuan selama 6 hari. Subyek penelitian ini adalah mahasiswa Universitas Hasanuddin angkatan 2021 yaitu 20 mahasiswa yang berminat mengikuti perlakuan. Tujuan dari penelitian ini adalah untuk melihat peningkatan kosa kata bahasa Inggris siswa setelah belajar menggunakan Duolingo dan untuk mengetahui bagaimana pandangan siswa terhadap Duolingo sebagai aplikasi pembelajaran bahasa dalam meningkatkan kosa kata bahasa Inggris. Penelitian ini dilakukan dengan dua metode yang masing-masing terdiri dari nilai tes dan survei. Data dikumpulkan melalui data kuantitatif. Hasil penelitian ini menunjukkan bahwa kosa kata bahasa Inggris siswa mengalami peningkatan. Nilai rata-rata pre-test adalah 58,75 dan post-test adalah 79. Hal ini menunjukkan bahwa nilai siswa mengalami peningkatan dari pre-test ke post-test. Selisih antara kedua tes tersebut tergolong signifikan dengan nilai 20,25. Dari data dapat disimpulkan bahwa terdapat perbedaan yang mencolok antara prestasi belajar siswa sebelum dan sesudah mendapatkan perlakuan. Selain itu, ini lebih efektif dan menarik daripada pengajaran konvensional dalam mengajarkan bahasa Inggris tentang kosa kata kepada siswa, terutama siswa yang memiliki kemampuan bahasa Inggris yang dibawah rata-rata.

Keyword: Duolingo, Kosakata, Teknologi, Pembelajaran Bahasa Inggris

CHAPTER I

INTRODUCTION

A. Background of The Study

English plays an important role in the world because it is the most widely spoken language in many countries around the world. In fact, most international events, scientific books, to information and technology media use English. Therefore, we can say that English is an International language.

English is very important in this era, that's why most countries make English one of the languages that must be learned and in their educational curriculum. People are required to learn and master English by involving four language skills, those are listening, reading, speaking, and writing. However, to be able to master these skills, students need vocabulary.

Vocabulary is a basic component that must be mastered by students in order to develop their English skills. To have good English skills, students must have sufficient vocabulary. Vocabulary is a core component of language skills and provides many basic of how well students speak, listen, read, and write.

Learning English will be a challenge for students if they do not have adequate vocabulary. For this reason, the teacher as the key to

successful learning will have an important role. Teachers should give emphasis in increasing the vocabulary of students. Teachers are required to use innovative ways and media that increase students' enthusiasm in learning vocabulary.

There are several strategies for students to learn individually in acquiring new English vocabulary, ranging from taking advantage of language learning opportunities around them such as watching English videos, listening to native speakers, using the language in English different contexts, reading, or watching television.

In this era, many new media for learning English have been created. One of them is an application called Duolingo which can be downloaded and installed through smartphone. As stated by Monica Burns on her website, “Duolingo is building a world with free education and without language barriers. Users can learn languages for free while translating the web”. The application provides information such as points earned, of course an overview trees, doodles and time spent. This application is also very child-friendly so it is easy to use, especially for beginners to learn a new language. Duolingo is the best free language-learning application. It's unlikely to take the learners from a beginner to being fluent or even conversationally proficient, but it gives the learners exercises that help them learn a lot about a new language and practice it daily.

Duolingo comprises game-like activities that ensure the learners will acquire the language in a fun way. Its features just like the pointing system, levels, leaderboard, and Duolingo encourage the learners to continuously learn the language. They feel motivated when they will get badge as a return. They also realize the importance and authenticity of the language as Duolingo provides interactive stories where students can practice real scenario conversations (Lian Camille: 2020).

Therefore, the author is interested in seeing how the Duolingo application effecting the improvement of students' English vocabulary, especially for beginner learners.

B. Identification of problem

Based on the background of the study above, there are several issues that can be investigated, including the effectiveness of Duolingo application in improving Student's English Vocabulary.

1. People are unable to speak English because of the lack of vocabulary they have.
2. Many people don't know about Duolingo application and most of them use smartphones more for fun than learning languages
3. People are afraid to use Duolingo because they think it is paid and difficult to use
4. Lack of interest in learning English because the

learning style is monotonous and boring

C. Scope of problem

This research is limited only to determine whether the Duolingo application is really effective in improving students' English vocabulary and how's students' perception on using Duolingo as a media for learning English vocabulary. The author only focused on students of Hasanuddin University batch 2021

D. Research Question

1. To what extent the Duolingo application affects the students' English vocabulary?
2. What are the students' perceptions on Duolingo to increase their English vocabulary?

E. Objectives of the study

1. To find out whether or not the Duolingo application affects the students' vocabulary.
2. To explain the students' perceptions about using Duolingo for increasing their English vocabulary.

F. Significance of the Study

There are two kinds of benefits from this research, namely theoretical and practical. Theoretically, this research is expected to contribute to educational studies, especially on vocabulary mastery through Duolingo application. They are also expected to be able to contribute as a solution to the problem of learning vocabulary in class. Meanwhile, practically, this research is useful to help students improve English vocabulary skills and can increase motivation in classroom

learning.

CHAPTER II

LITERATURE REVIEW

A. Previous Study

The author tries to support her research by looking for related research on the use of the Duolingo application to increase students' English vocabulary to compare previous research with the author's research. Based on previous studies, the authors found some similarities and differences.

Pangkuh Ajisoko (2020) based on his research focused to explore the use of the Duolingo application in increasing the vocabulary of students at Borneo University of Tarakan. The research design of his study was a pre-experimental study with pre-test and post-test. Research instruments in the form of tests and questionnaires for answer the research questions about how the use of Duolingo in improving student's vocabulary skills. By using quantitative methods, the researcher can find out whether student's vocabulary increases or not.

Same as the previous research, Hermariyanti Kusumadewi & Myta Widyastuti (2018) wanted to find out the effects of using Duolingo towards student's vocabulary mastery. This research is experimental research to find effects of using Duolingo (x) towards student's vocabulary mastery (y) in controlled condition. The experimental method used is true-experimental design, the researchers used Post-test Only Control. The sampling technique used by the researcher is simple random

sampling, which is the experimental class VIII consisting of 30 students, as well as the control class VIII composed of 30 students. The result of student learning English with media Duolingo's Android Application has a positive effect compared to conventional student approaches.

In other research, Bennani & Mosbah (2022) intend to investigate the effectiveness of Duolingo platform in developing learners' vocabulary and grammar acquisition case of ceil adult beginner EFL learners. To see how effective Duolingo is, seventy adult English learners enrolled in a foreign language teaching intensive school were selected for this study to test the hypothesis that adults using Duolingo performed better than those using the teacher-directed method. The comparison of the results collected based on the pre and post-tests was used to show the extent to which the informants succeeded in improving their vocabulary and grammar.

Amin (2019) based on his research argued that the Duolingo application is very useful in increasing students' vocabulary mastery. Its implementation makes the learning process be more entertaining and effective. Learning is free while earning points for correct answers, racing against the clock, and leveling up.

B. Theoretical Background

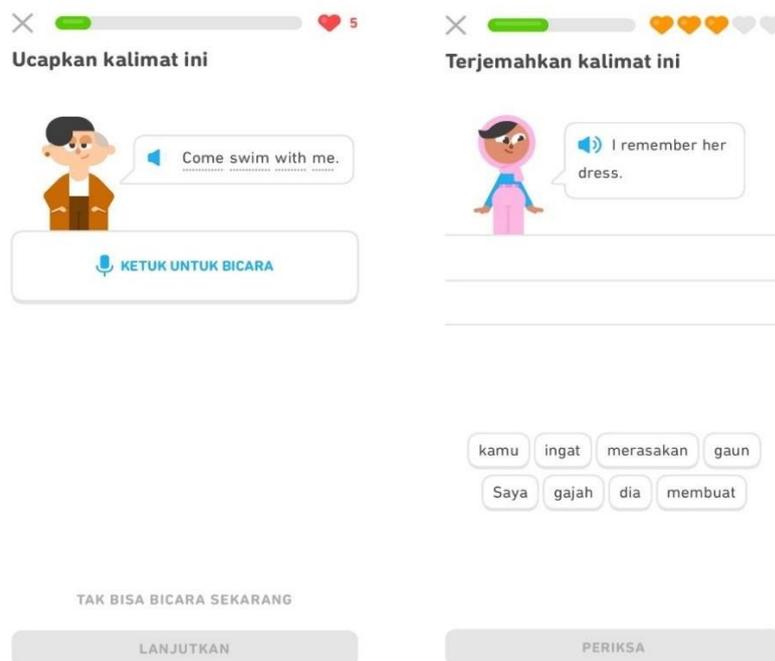
1. Duolingo

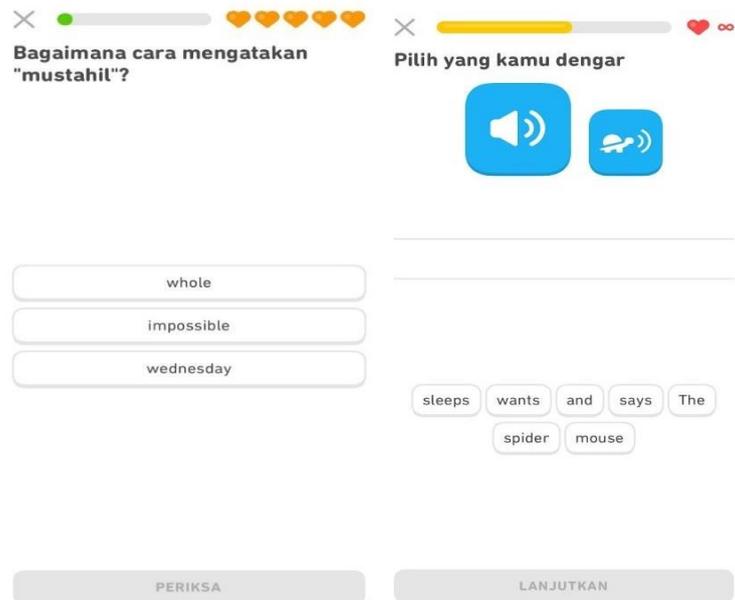
Duolingo is a free application created by Luis Von Ahn and Severin Hacker in November 2011. Its slogan is “Free language education for the world.” According to its website, it has more than 30 million registered users. It offers several languages for English speakers as well as others for non-English speakers.

Duolingo is a free mobile application and statistically, is the most popular in the category of Education in Google Play now days. Portnoff, et al (2021) stated that with around 4 million active monthly users on its platform, Duolingo has the largest language learning data set of any companies and research institutes. Duolingo researchers used an EDM/LA method for searching datasets (including internal assessments and log data) to uncover insights that contribute to enhancing and modifying the language learning experience.

Duolingo is a useful language application which can provide students with practical and systematic steps to learn new things languages, including English. Duolingo has a sleek design, easy to use, and can be used by students of various ages and cultures (Nushi & Hosein Iqbali, 2017).

On Duolingo, learners earn XP (Experience Points) whenever they do activities, like completing a lesson or reading a Story. Duolingo Skills are colorful circles that cover the vocabulary and grammar relevant to a particular communicative function. Users also can define weekly goals. This will also determine the level of intensity of learning material. The learning content that will be presented is quite diverse and fun. The material is not only in the form of text, but also audio and visuals which are packaged almost like a game that feels playful. This service also focuses not only on translating words, but also on grammar which is explained at the end of the material.





Now Duolingo application has also *expanded Duolingo for Schools* by navigating to *school.duolingo.com*. On this website we can invite students by sending them an email invitation, personalized link, or class code. We can also create accounts for students, or ask them to create their own accounts and invite us to track their progress from their account settings.

After set up the classroom, we can see who has joined, send login information back to students who haven't accepted an invite, and adjust a variety of class settings, from the class name to settings that define what type of content students can engage with.



This application teaches English to millions of people for free, although some have criticized the developer's method of making money by making people translate text for free as a by-product of learning a language. What makes Duolingo apart from another free language learning application is its methodology: teaching its users a foreign language through translation. If the learner is new to the language, they start with the basics. It can be said that Duolingo is a very easy and very easy application simple to use.

2. Vocabulary

In learning English, there are components of language skills and the role of language that must be mastered. One of them is vocabulary. Vocabulary as a field of knowledge in language,

vocabulary plays a big role for learners in mastering language. Salawazo et al (2020) stated that the development of learners' vocabulary is an important aspect of their language development. Vocabulary knowledge is more than just quoting a word, it requires meaning based on a particular context and is also often seen as an important tool for second language learners.

According to Wikipedia, a vocabulary is a set of familiar words within a person's language. A vocabulary, usually developed with age, serves as a useful and fundamental tool for communication and acquiring knowledge. Acquiring an extensive vocabulary is one of the largest challenges in learning a second language.

Vocabulary is the center of language, and without vocabulary, humans cannot communicate effectively or express their ideas both orally and in writing. Vocabulary is used as the basis for arranging words into good word sequences sentence. Therefore, students must have mastery of vocabulary. If students cannot master and learn more vocabulary, it is a problem and it is difficult for them to understand the language especially learning to speak, listen, read. In the vocabulary to support their skills, they must master it.

Vocabulary is almost not obtained in the learning process in the classroom even though it the easiest aspects of a second language to learn. Students must master vocabulary to develop others aspects. Arisman (2021) argued that mastering vocabulary is important in

getting know any language. This is due to the fact vocabulary is built into all elements of the language, to be specific reading, writing, speaking and listening. While not having sufficient vocabulary, it must be not possible to gather proper abilities in any language skill.

In other words, vocabulary acts as a center for teaching English to develop language skills. Without a lot of vocabulary students cannot understand others or express their ideas. Vocabulary is the total number of words. When students start learning English, students must acquire the vocabulary of that language. This is the initial process for students to learn the word units presented by the teacher.

3. The Importance of mastering vocabulary in Language Learning

Mastering vocabulary means that students have good knowledge of vocabulary that includes meaning, spoken form, written form, grammatical behavior, word derivation, word collocation, word list spoken and written words, word connotations or associations, and words frequency. To learn vocabulary, students must know the importance of things what they want to learn. In fact, the importance of learning vocabulary is to help students in understanding what target language they want to learn.

Santiago Dakhi (2019) argued that it is plausible that vocabulary plays an important role in language use. It is the heart of language skills. More importantly, it appears to function as a basis for

communication, reflection of social reality, emotion booster, and academic ability predictor. Besides, receptive and productive vocabularies, and active and passive vocabulary according to previous studies have various contributions to language skill performances.

Learning language not only prepares language material but also provides training to students how to speak the language, both orally and in writing. To achieve optimal results from vocabulary learning, teachers need to equip students with words related to certain fields. In each section of the science used special words. Vocabulary enrichment efforts are necessary carried out continuously and can be obtained through certain areas.

4. Learning English Using Technology

Technology has always been an important part of the environment, especially when it comes to teaching and learning. This is an important part of the teaching profession through how they can use it to facilitate the learning process. Technology is a significant part of the learning experience and learning support for teachers, starting from initial preparation, learning experience to teaching and learning process. With the inclusion of technology in our daily lives, it is time for us to think about the idea of integration technology into the curriculum and aims to embed technology into teaching to support learning process.

Reza Ahmadi (2018) supported that the use of technology has become a part of the learning process in and out of the class. Every language class usually uses some form of technology. Technology has been used to both help and improve language learning. Technology enables teachers to adapt classroom activities, thus enhancing the language learning process. Technology continues to grow in importance as a tool to help teachers facilitate language learning for their learners.

Hossain (2018) investigated the use of mobile apps and their efficacy in learning English. His research findings show that the majority of students think that they use smartphones and other applications to learn English. In addition, those who used English learning apps performed better on English proficiency tests than those who did not use mobile apps when it came to English learning. Hossain stated that most students also found mobile phones and applications very easy and convenient to use when learning the target language.

C. Theoretical Framework

The main theory that I use is the positive effect of Duolingo application in improving Student's English Vocabulary. Paguh Ajisoko is one of the researchers who analyzes the use of the Duolingo application in improving students' English vocabulary. The author considers that this research is similar since it raises the positive side of the Duolingo application as a medium in improving English vocabulary mastery. The

theory that is applied by the author is the statement by Paguh Ajisoko about the use of the Duolingo application which based on the results of his research turned out to give good results scores in increasing students' English vocabulary.

For this research, the author refers to the research from Paguh Ajisoko with using the same research instruments, namely Pre-Test, Post Test, and Questionnaire, because the author considers these instruments suitable to use.