

**THE EFFECTIVENESS OF USING DUOLINGO ON  
STUDENTS' VOCABULARY MASTERY AT SMAN 1 KEDIRI**

**THESIS**

Presented to:

State Islamic Institute of Kediri

In Partial Fulfillment of the Requirement

For the Degree of Sarjana in English Language Education



**BY**

**NADIA FARIHATUL JIHAN**

**NIM: 20202093**

**ENGLISH DEPARTMENT**

**FACULTY OF TARBIYAH**

**STATE ISLAMIC INSTITUTE KEDIRI 2024**

**COVER PAGE**

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**NIM. 20202093**

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## DECLARATION OF AUTHENTICITY

Name : Nadia Farihatul Jihan  
Student's ID Number : 20202093  
Study Program : Department of English Language Education  
Title of Thesis : The Effectiveness of Using Duolingo on Students' Vocabulary Mastery at SMAN 1 Kediri

I hereby declare that the thesis and the work presented within it are my own and have been generated by me as a result of my original research. It does not include any materials previously written or published by another person, except those indicated in support of an application for another degree or qualification at this or any other university or institution of higher education. Therefore, I am solely responsible for the thesis if there are any objections or claims from others.

This thesis is submitted to fulfill the requirement for the degree of Sarjana (S1) in the English Study Program at the State Islamic Institute (IAIN) of Kediri.

Kediri on 14<sup>th</sup> June 2024



8726DALX192928888

Nadia Farihatul Jihan

**NIM.20202093**

**APPROVAL PAGE**

This is to certify that the Sarjana's Thesis of Nadia Farihatul Jihan has been approved by thesis advisors for further approval by the board of examiners.

**THE EFFECTIVENESS OF USING DUOLINGO ON STUDENTS'  
VOCABULARY MASTERY AT SMAN 1 KEDIRI**

**Nadia Farihatul Jihan**  
**NIM.20202108**

**Approved by:**

**Advisor 1**



**Erna Nurkholida, M. Pd.**  
**NIP: 197611252007102005**

**Advisor 2**



**Drs. Agus Edi Winarto, M. Pd**  
**NIP. 196505272000031001**

**RATIFICATION SHEET**

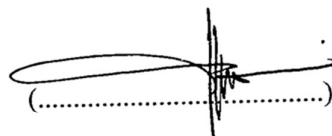
**THE EFFECTIVENESS OF USING DUOLINGO ON STUDENTS'  
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**NIM. 20202093**

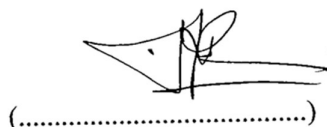
Has been examined by the board of examiners of State Islamic Institute of Kediri  
on 14<sup>th</sup> June, 2024

1. Main Examiner  
**Mohammad Muhyidin, M.Pd**  
**NIP.198012262009121004**



(.....)

2. Examiner I  
**Erna Nurkholida, M. Pd**  
**NIP: 197611252007102005**



(.....)

3. Examiner II  
**Drs. Agus Edi Winarto, M.Pd.**  
**NIP. 196505272000031001**



(.....)

Kediri, on 14<sup>th</sup> June 2024

Acknowledged by Dean of Faculty of Tarbiyah  
State Islamic Institute of Kediri



**Prof. Dr. Hi. Munifah, M.Pd**  
**NIP. 197004121994032006**

## NOTA KONSULTAN

Kediri

Lampiran : 4(empat) berkas  
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Di

Jl. Sunan Ampel No. 07 Ngronggo Kediri

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Memenuhi Permintaan Bapak Rektor untuk membimbing penyusunan skripsi mahasiswa tersebut di bawah ini:

Nama : Nadia Farihatul Jihan

NIM : 20202093

Judul : The Effectiveness of Using Duolingo on Students' Vocabulary Mastery at SMAN 1 KEDIRI

Setelah diperbaiki materi dan susunannya, kami berpendapat bahwa skripsinya telah memenuhi syarat sebagai kelengkapan ujian akhir Sarjana Strata Satu (S1)

Bersama ini saya terlampir berkas naskah skripsinya, dengan harapan dalam waktu yang telah ditentukan dapat diajukan dalam sidang munaqosah.

Demikian agar maklum dan atas kesediaan Bapak kami ucapkan terimakasih.

Wassalamualaikum Wr.Wb

**Pembimbing 1**



**Erna Nurkholida, M. Pd.**  
**NIP: 197611252007102005**

**Pembimbing 2**



**Drs. Agus Edi Winarto, M. Pd**  
**NIP. 196505272000031001**

**MOTTO**

“Work Until You Don’t Have to Introduce Yourself”  
(Esternatalia)

“Tidak Perlu **Sempurna**  
Yang Penting **Selesai**”

“Ikan Hiu Makan Tomat  
Alhamdulillah Tamat”

## DEDICATION

I dedicate this thesis to:

1. All praise is due to Allah SWT, The Lord of the Worlds, for his mercies and blessings that have enabled me to complete this thesis.
2. My Dearest parents, Khusnul Khatimah and Masjudin. Thank you for endless love, pray, countless material and affection that has been given so much. Thank you to reminding me to keep going and never give up. Thank you for your sacrifice. I don't think I could ever express how much I love you and how lucky I am being your daughter, Thank you so much for everything, my number one support system.
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10. Thank you for my crush, you are one of the reasons the author completed this thesis to continue to the next life goal, although until now you don't know that I have a crush on you.
11. Finally, to myself: thank you for being able to try and fight so far, for being able to control emotions and never give up as despite the difficulties of preparing this thesis.

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all praises to Allah, because Allah has given guidance and blessings for me to finish this thesis. Peace and salutation are always be given to the last Prophet Muhammad Saw.

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Finally, by reciting Alhamdulillahirobbil'alamin, the researcher hopes that this research will contribute to the improvement of the English teaching and learning process. However, the writer also realizes that it is still far from perfect. Therefore, all criticisms and suggestions will be appreciated.

## ABSTRACT

**Jihan, Nadia Farihatul.** 2024. *The Effectiveness of Using Duolingo on Students' Vocabulary Mastery at SMAN 1 KEDIRI* Department of English Language Education, Faculty of Tarbiyah State Islamic Institute (IAIN) of Kediri, Advisor: (I) Erna Nurkholida, M.Pd. And (II) Drs. Agus Edi Winarto, MPd.

**Keywords:** *Duolingo, Vocabulary Mastery,*

English words are challenging, and it will be difficult to avoid forgetting them. As the basic component of all languages, one of the components of English that students must acquire is vocabulary. Students won't be able to speak, write, read, or listen in English. Or, in other words, developing effective vocabulary-learning strategies is essential to mastering English. In addition, there are linguistic elements such as pronunciation, grammar, and vocabulary that connect these four key skills. To solve this problem, the researcher is using the Duolingo application as a learning tool. The aim of this research was to find out whether or not first-grade students at SMAN 1 KEDIRI could significantly learn first-grade vocabulary through the use of Duolingo in the 2024 academic year.

This study compared two classes using a quasi-experimental design and quantitative methods. The study's focus was on SMAN 1 KEDIRI first-grade students. Two classes were studied in this study: class XC served as the control group and class XA as the experimental group. There were thirty students in the control group and thirty in the experimental group. Three sessions of Duolingo vocabulary instruction were given to the experimental group, while Three sessions of Quizizz was given to the control group. Once the pre- and post-test data were obtained, the SPSS 23 program was used to analyze the data.

The average post-test results showed the experimental class scored 87.17, which was far higher than the control class's score of 64.17. Additionally, the result of the ANCOVA can be seen from the sig. number, which indicated  $0.000 < 0.05$ , indicating that  $H_a$  is approved and  $H_0$  is disapproved. It indicates that there is a significant difference between students who have been taught by Duolingo and those who have been taught by Quizizz. Since the researcher used  $\alpha = 0.05$  (5%) as the significance level, the null hypothesis ( $H_0$ ) was rejected, and the alternative hypothesis ( $H_a$ ) was accepted. The findings of this research's statistical computations demonstrated that using Duolingo is significantly effective on students' vocabulary mastery at SMAN 1 KEDIRI.

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## CHAPTER I

### INTRODUCTION

This chapter talks about the background of the study, the research problem, the objectives of the study, the significance of the study, and definition of the key terms.

#### **A. Background of the Study**

Learning a foreign language is one of the most important components of learning a language by increasing the vocabulary. Foreigners will find it challenging to understand a new language if they learn it without becoming fluent in its vocabulary. As the basic component of all languages, one of the components of English that students must acquire is vocabulary. In addition, there are linguistic elements such as pronunciation, grammar and vocabulary that connect these four key skills. According to Wilkins on Thornbury (2002, p13) that if we do not master grammar, we can only take a small part of the language, and without vocabulary, we cannot communicate anything. Ahour and Salamzadeh (2014, p. 12) stated that language is fundamental building blocks are words, which serve as the meaning-containment units from which bigger structures like sentences, paragraphs, and entire texts are formed. In other words, vocabulary is the foundation of language and must be acquired first.

The fundamental component of a language is vocabulary, it brings a purpose to a language. This suggests that learning additional languages will



make it easier for someone to communicate what they think. To generate, organize memory, and use newly learned words in a variety of contexts is the aim of vocabulary acquisition (Teng, 2016). English words are challenging, and it will be difficult to avoid forgetting them. Students won't be able to speak, write, read, or listen in English. Or, in other words, developing effective vocabulary-learning strategies is essential to mastering English. Modern teaching methods should be supported by teachers' ability to employ the newest technologies. Teachers using a range of instructional methods and media may help students enjoy learning English, especially when it comes to vocabulary mastering, which is one way to get over some of the challenges that come with it. We can learn with the aid of digital technologies. One media improving vocabulary mastery is the Duolingo app. This is a mobile learning program that extends to a range of subjects, including grammar, conversation, reading, writing, vocabulary, and listening.

Duolingo is a smartphone application for Ios and Android users, created and designed by Luis Von Ahn and Severin Hackers. Duolingo was launched in 2012 for iPhone users and released an Android app in 2013. Currently, Duolingo has been used by more than million users worldwide and scored 4.7 on the scale 5 that more than 11 million users have given. Habibie (2020) states Duolingo as a mobile app for language learning that combines questions about grammar with audio and visual elements. Silmi (2019), in her research, said that there are surprising facts related to student perceptions. All students agreed that Duolingo has good features and is easy to understand. This is also what

makes all students like this application. In addition, most students answered that they use Duolingo to learn vocabulary, improve listening and speaking skills, and complete writing assignments.

Some previous studies have investigated the use of Duolingo applications in education, especially vocabulary learning. In her study titled "The Use of Duolingo to Improve Students' Vocabulary Mastery in SMP Darul Fikri JOMBANG" Warda (2020), Playing Duolingo can help students become more effective with language at SMP Darul Fikri Ngoro JOMBANG Another example is from Matra (2020), which concentrated on expanding vocabulary. Her research revealed that the Duolingo app is helpful for teaching vocabulary in the classroom. Many studies on the use of the Duolingo application have shown that it can help students become more successful in vocabulary. (Ajisoko, 2020; Kusumadewi and Widyastuti, 2018; Tiara Rahman and Handrianto, 2021; Munday's, 2016). The similarity between previous researchers and this study is that both examine the effectiveness of using Duolingo in improving vocabulary mastery, while the difference is that this study focuses on vocabulary about animals, their characteristics, lifestyles and synonym.

Therefore, the researcher is interested in using Duolingo application teachers in classroom methods, especially when teaching English, and supporting students in building a better vocabulary knowledge through the use of "Duolingo Games." Because it is easy to use anywhere and by anyone, especially students, the Duolingo application was chosen by the researcher.

The researcher wants to know the effective of Duolingo if the teacher implements it in classroom learning for students in SMAN 1 Kediri. This study aims to see whether this application will help in their vocabulary progress or not. One expects a positive atmosphere in the classroom. It could be used as an alternative strategy for keeping students' vocabulary current. In light of this hypothesis, the researcher plans to carry out an experiment entitled "The Effectiveness of Using Duolingo on Students' Vocabulary Mastery at SMAN 1 Kediri". The writer is going to implement Duolingo as a tool in teaching and learning vocabulary, and the students' vocabulary mastery is expected to increase.

#### **B. Research Problem**

In line with the research background, the researcher formulates the following research questions "Is using Duolingo effective significantly on students' vocabulary mastery at SMAN 1 Kediri?"

#### **C. Research Objective**

This research is conducted to find out whether Using Duolingo is effective significantly on students' vocabulary mastery at SMAN 1 Kediri.

#### **D. Research hypothesis**

The research's hypothesis centers on the effectiveness of Duolingo on students' mastery of vocabulary. Two categories of hypotheses exist:

### 1. Null Hypothesis (H0)

The null hypothesis states that there is no significant difference between students' who are taught using Duolingo and those who are taught using Quizizz in learning vocabulary.

### 2. The Alternative Hypothesis (H1)

There is significant difference between students' who are taught using Duolingo and those who are taught using Quizizz in learning vocabulary.

## **E. Scope and limitation of the Research**

Based on the explanation above, this research focuses on finding the effectiveness of using Duolingo is useful to help students' vocabulary mastery.

## **F. Significance of the Study**

The study is expected useful for:

### 1. The Students'

For the students, it is hoped that the results of this study can enhance their abilities. In other words, the primary objective of the research is to determine if using Duolingo can increase their mastery of vocabulary. Duolingo is not just a learning tool, there are many aspects that you can enjoy from Duolingo such as Available on Android and Ios, effective, and easy to access, Duolingo enhances students' experience and helps them learn exciting ways to use Duolingo to enhance vocabulary mastery.

### 2. The English Teachers

For teachers, it provides further details to the teacher about a new type of classroom application that can be employed to increase vocabulary

mastery and raise the quality of the teacher's English lessons. Additionally, the researchers hope this study will provide teachers with new insights into learning, especially in vocabulary mastery. Furthermore, the results of this study also aim to convey students' experiences using Duolingo to enhance their vocabulary mastery.

### 3. The Other Researchers

For other researchers, this study can be utilized to learn more about a variety of teaching tools and how students learn language with them, providing the fundamental data for additional research by other researchers who have an interest in teaching English, particularly in the teaching and acquisition of vocabulary mastery.

## **G. Definitions of the Key Terms**

To make this thesis easier to understand, the researcher would like to define the words used in the title:

### **1. Student vocabulary**

In the Big Indonesian Dictionary (1990), student means a person (a child who is studying, attending school). Meanwhile, according to Shafique Ali Khan (2005), student comes from the word student, which refers to a person who attends a learning facility in order to acquire or learn specific kinds of education. Here, students are research participants who are joining the vocabulary learning method with Duolingo as a tool. In the Oxford Dictionary (2008, p.495), vocabulary is words that people use and know. In this search, the vocabulary is based on the basic vocabulary

provided by Duolingo, which relates to animals, their characteristics, and lifestyles. Therefore, the definitions of the terms used by the students in this study are those that Duolingo provides and that students ought to be adept with.

## **2. Duolingo**

Luis von Ahn and Severin Hacker created the Duolingo app (2012), which is a free language learning tool. In addition to the online version, the program is accessible on iOS, Android, and Windows Phone platforms. Twenty-two more language courses are being developed for the app, which as of November 2016 offered 66 courses in 23 languages. The app has nearly 120 million global users in attendance. In the future, Duolingo could prove to be a helpful resource for language acquisition and vocabulary improvement. This is based on Munday (2015, p.96), who says that Both in-person and online, Duolingo can prove a useful addition to official language programs provided by colleges or schools. That means, researchers are trying to integrate the students to increase their vocabulary by using the Duolingo app as a tool for learning English in the classroom.

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter discusses the theoretical basis and previous research used Duolingo in teaching and learning vocabulary mastery. The theoretical foundations described include: Definition of vocabulary, Vocabulary Mastery, The Kinds of Vocabulary, Problems in Learning Vocabulary, Definition of Duolingo, Advantages of Duolingo, Disadvantages of Duolingo, Using Duolingo Application to Learn and Teach English, Definition of Quizizz, Steps for Using Quizizz, Advantages of Quizizz, Disadvantages of Quizizz, as well as explaining four studies related to this research and Research Hypothesis.

#### **A. Vocabulary**

##### **1. Definition of vocabulary**

The acquisition of vocabulary is an integral part of learning a language. Learning vocabulary is just as crucial as learning other language components and skills. Vocabulary, as described by the Oxford Advanced Learner's Dictionary (2000, p. 1506), is comprised of all the words that a person is aware of, employs, or knows in a given language, as well as all the terms that are used when discussing a specific topic. Vocabulary, one of the building elements of language, is beneficial to anyone seeking to communicate effectively. Students can readily access information based on their own language by learning how to identify words in English.

The term "vocabulary" refers to knowledge about the pronunciation and meaning of words that have been saved in one's memory. Lawrence

Erlbaum Associates (2005, p.1) defines that words typically have complicated and overlapping meanings. As a result, teachers must focus on helping children understand language. Before kids learn English vocabulary, teachers should teach them a variety of terms until they can use all the words on their own without assistance. If students master the vocabulary, their ability to understand all information from a foreign language and their vocabulary will help them communicate with everyone. Students will also be able to speak and hear English more clearly while speaking with native speakers. Based on the definitions explained above, we can conclude that the development of one's vocabulary is an essential aspect of language learning. in learning a second foreign language. If students do not know much vocabulary, they won't be able to share what they are thinking. Therefore, it is very important to master vocabulary.

## 2. Vocabulary Mastery

Understanding what is learned in the language is primarily dependent on one's vocabulary. It is necessary to express one's thoughts and have the ability to comprehend what others are saying. Their influence can be direct knowledge of the subject or indirect ability to solve issues when meaning is lost. Successful vocabulary development occurs when students experience the advantages of creating words through experience. Vocabulary mastery, according to Anderson and Bachman (2000, p. 16), entails students being able to match terms they are given to synonyms, dictionary definitions, or words in their native tongue. Here, he



emphasized that vocabulary mastering had to do with a student's understanding of the English language. How much the students are aware of the English word's definition and how much they can connect it to their native tongue.

Furthermore, according to Douglas Fisher (2016, p. 3), vocabulary is one sign of a learner's previous understanding. Additionally, it helps with the comprehension of spoken and written language. But students are assessed on more than just their vocabulary; they are also evaluated on their understanding of the concepts associated with the words. This means that students can expect difficulties in developing the four English language abilities and will be unable to articulate their opinions without having good vocabulary. If students know more vocabulary, it can help them know communication concepts and increase their confidence in expressing their ideas. So, vocabulary knowledge is an important factor in children's learning process.

### 3. The Kinds of Vocabulary

According to Elfrieda H. Hiebert and Michael L. Kamil (2005, p. 3) vocabulary is divided into three, which are:

- a. Oral vocabulary, or the list of terms we can say and understand when speaking orally or listening to others.
- b. Print vocabulary is the list of words that we know the meaning of when we write or read aloud. We can conclude that oral and print

vocabulary are divided according to the way the students received the words.

- c. Productive vocabulary is the collection of terms they can apply in both writing and speaking. These are terms that are widely used, well-known, and easy.

According to Nation (2001 p.38), there are two categories of vocabulary: productive vocabulary and receptive vocabulary.

- a. Receptive vocabulary involves the understanding of word structure through reading or listening and determining their meaning. This is a rather passive vocabulary gathering practice.
- b. Productive vocabulary involves the desire to convey meaning through writing or speaking, as well as the ability to find and create word forms that correspond to what is said or written. This exercise not only calls for active performance but also boosts students' self-expression of ideas, opinions, and thoughts.

These experts' explanations bring one to the conclusion that vocabulary can be divided into two categories: productive vocabulary based on activity (writing and speaking) and passive receptive vocabulary (written and printed). Academic, technical, high frequency, and low frequency terms are all included in both forms of vocabulary.

#### 4. Problems in Learning Vocabulary

EFL students, especially Indonesian students, often have difficulty memorizing and understanding vocabulary. There are many factors that

stimulate it, the fact that students get bored in class is one of the causes. Students are bored with learning vocabulary and learn passively by listening to the teacher explain. In addition, the amount of vocabulary that students possess is still low. This limits how they interact in English.

There are many compelling factors why developing one's vocabulary may be an important component of a language education that requires careful planning. Two elements are categorized by Muhibbin Syah (2005, p. 132) as contributing to students' difficulties acquiring vocabulary. Both social and personal factors. According to his claim, the individual element is the component that originates with the students and is made up of aptitude, growth, motivation, and attitude. On the other hand, social elements are those that are present in the learners' immediate surroundings, including their family, teachers, surroundings, and facilities.

Azar (2012), in his research, said that a lot of students are afraid to take possession when using what they have studied. When they hear or read a word, students can assume they "know it already," however, they might not be able to explain the word correctly in various contexts or with pronunciation. From there precisely. Emphasis is placed on students' effective vocabulary. When it comes to later stages of vocabulary mastery, students should use their vocabulary effectively, such as writing or speaking. Then comes the tool that teachers choose. Students generally don't find much interest in the media that teachers apply. Some teachers only prepare basic media for students, they will get uninterested in it. If

they are uninterested, they will not focus on the learning process. Teachers should use interesting media to attract students' attention. Get students' enthusiasm with interesting media.

## **B. Duolingo**

### 1. Definition of Duolingo

Technologies such as computers and smartphones can also play a role in education as a medium. Media is whatever that transfers data to help source and user interact during the learning process. Media is divided into three: text, audio and images. They are used as learning tools to make learning easier, not boring and more active. According to Shelly (2010), Digital media is the newest type of media available today, and it refers to the technology utilized as media. Any computer-based presentation or application program that incorporates multimedia elements is considered digital media. The statement made by Shelly emphasizes the need for teachers to utilize technology in the classroom responsibly and, above all, to ensure that students are utilizing it in accordance with their instructions.

In teaching vocabulary, to increase vocabulary and its knowledge to students, we as teachers can benefit from the use of media. There are many tools that teachers can use, one of which is the Duolingo app ([www.Duolingo.com](http://www.Duolingo.com)). Duolingo was launched in June 2012. It is an interesting platform to learn foreign languages. It includes two main elements, Grammar and vocabulary exercises. It was created by Dr. Luis von Ahn and Dr. Severin Hacker. Duolingo is a free language learning app

and website. How They say on their website: “Duolingo is building a world with free and unattainable education Promoting fishing language. Users can learn languages for free and at the same time translate the Web” (Jaskova 2014, p.16). Nushi and Eqbali (2017) state that while language learning is difficult, Duolingo helps users feel more confident about their ability to achieve their learning goals and reduces their anxiety related to it.

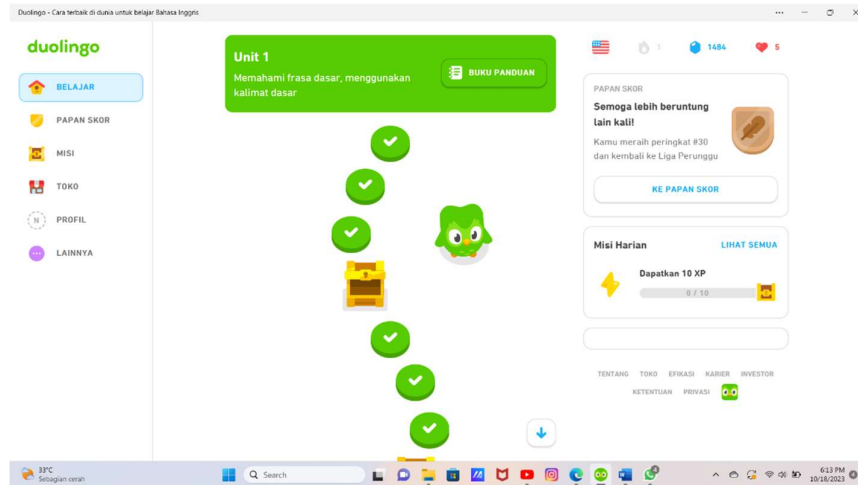
This is based on Munday (2015, p.96), who says that Duolingo can serve well as an enhancement to formal language courses offered through schools or universities, both in the classroom and online. Duolingo comes in two versions, one for teachers and one for teachers and one for students. For students, it displays several exercises and questions grammar and vocabulary are grouped according to different contexts. About Teacher edition (Duolingo classroom), includes student management and manage the English program, build working groups, supervise class activities, and provide tests, assessments, and online comments.

Figure 2. 1 Duolingo Application



## 1. Items on Duolingo

Figure 2. 2 Items of Duolingo



As shown in figure 2.2. The figure shows 5 sections within Duolingo. The first section (1) consists of the user profile, in which there are account settings, help, and exit. In addition, there is performance which is for buying goods in the store. The second section (2) shows the topics that are tested. There are several levels within each topic. Section (3) is the score board. When the user levels up a skill, the user gets a score, and the type of exercise gets gradually harder. Section (4) is the user's daily tasks to do. Section (5) shows the language that the user is learning in this Duolingo app.

## 2. Advantages of Duolingo

There are several advantages of using Duolingo as a means of learning in Class: