CHAPTER II

REVIEW OF RELATES THEORIES

This chapter reviews the basic theories used in research on improving vocabulary. To be more specific, this review discusses: Vocabulary is automatically explained, from the definition of vocabulary, aspects of vocabulary, learning vocabulary. Duolingo's application is also explained in this chapter. The explanation of Duolingo includes its definition of application, the features, and the advantages of Duolingo application.

A. Vocabulary

1. The definition of vocabulary

Vocabulary knowledge can be divided into productive and receptive knowledge (Nation & Meara, 2002). Productive vocabulary knowledge includes the words that an individual is able or chooses to use appropriately and accurately through speaking or writing (Nation, 2001). In other words, Receptive knowledge carries the idea that people receive language input from listening, speaking, and trying to comprehend information while productive knowledge implies that people produce language forms by speaking and writing to convey messages to others (Nation, 2003).

Receptive vocabulary knowledge includes the words that an individual is able to remember the meaning of and understand while listening to or reading a word (Schmitt, 2000). Productive vocabulary

knowledge includes the words that an individual is able or chooses to use appropriately and accurately through speaking or writing (Nation, 2001). Applied to the study of vocabulary, receptive knowledge suggests that receptive vocabulary is gathered from listening, reading, and retrieving their meaning whereas productive vocabulary use occurs when a person wants to express vocabulary through written or spoken forms (Schmitt, 2000).

From the definitions above, we can conclude if vocabulary is all about words in specific languages or pronouns that we try to understand. Vocabulary is very important to learn, many websites are useful to help improve vocabulary. Vocabulary, which is usually developed with age, works as a useful and basic tool for communication and knowledge acquisition. Getting a broad vocabulary is one of the biggest challenges in the second language. Also included from some expert opinions about vocabulary, if vocabulary learning can be done with a variety of methods.

2. Aspect of vocabulary

According to Lado in Mardianawati (2010: 11), There are 3 aspects that must be considered in vocabulary learning.

Vocabulary aspect as follows:

a. Meaning

When the teacher tells students about the meaning, then the teacher must explain that a word may have more than one meaning when used in a different context. To find meaning, the teacher can instruct his students to open a dictionary.

According to Nurhayati (2015) Aspect of Meaning (2)" meaning relationship.

How the meaning of one item relates to the meaning of others can also be useful in teaching. There are various such relationships: here are some of them the main ones.

- a. Synonyms: item that mean the same, or nearly the same; for
- b. Antonyms: items that mean the opposite; rich is an antonym of poor.
- c. Translation: words or expression in the learners' mother tongue that are more or less) equivalent meaning to the item being taught.

3. Learning vocabulary

Teachers have always been naturally interested in how learners go about learning vocabulary. If we know more about learner strategies and what works well, we can help learners get more benefit strategies. According to Brown and Payne in Hatch and Brown (1995: 373) did an analysis that resulted in a very clear model where the strategies fall into essential steps:

a. Getting the word meaning.

Getting the meaning of words, language learners may also need a different kind of definition of distinctions depending on the words being learned and the reason for needing them.

b. Consolidating word form and meaning in memory.

In this step, the students do the exercises in order to make a memorable connection between the form and the meaning of the words. Many types of learning vocabulary training such as us flashcards, matching exercises, crossword puzzles, strengthen the form-meaning connection.

c. Using the word.

The final step in learning words is using the words. It has a goal to provide a mild guarantee that words will mean not to fade from memory once they are learned.

B. Duolingo Application

1. Definition of Duolingo Application

Duolingo is a free language learning application created by Luis von Ahn and Severin Hacker. This application, in addition to being available in the web version, is also available in the android, iOS and Windows Phone versions. Duolingo builds a world with free education and no language barriers. Users are able to learn languages for free while simultaneously translating web"(Jaskova, 2014, p.16). In November 2016, the application provides 66 different language courses available in

23 languages; there are 22 more courses that are still being developed. Around 120 million users from all over the world have registered in this application.

Duolingo provides written and sound learning, there is also the practice of speaking for more experienced users. Duolingo has an ability tree where users can complete a chapter then go to another tree branch.

Users get "experience points" (XP) after they finish a chapter, enough points can increase the level of users. The finished chapter will be golden, over time if the user rarely practices, the color of gold can be disappear and the user must complete the chapter. If the user has completed all the chapters in one course they can repeat the exercise.

Each chapter consists of sentences that must be translated, the sentence can contain new words or have been learned, the user can copy the meaning of the sentence by holding the mouse pointer over each word. After the user sends the translation, they can immediately find out whether they are right or wrong, each correct translation could be add points and vice versa, after full points then the chapter has been completed, the user can look back at what has been learned. Each sentence can be commented on by other users, some report errors, and others make jokes because the sentence sounds weird and funny.

This application allows the student to learn many different languages, such as Spanish, English, French, Italian, or Portuguese. You only need to choose the language you want to lean on when you first use

the application. And certainly, this application will also help you to improve the vocabulary you have.

2. Duolingo Application and the features:

First step, register on the Duolingo application. Please Download
 Duolingo Application on the Play store. After that please login on
 Duolingo with email address. Finally, Duolingo application can
 used.



Figure 2.1 Duolingo Application's Register

2. After the user is registered in the Duolingo application. The main menu could be appear in all categories in Duolingo. Users simply what courses they want to learn. As can be seen, Duolingo has many categories such as Spain, France, Turkey, and many more. Students can choose English for their studies. This Duolingo application not only offers one type of language, but there are also dozens of foreign languages that can learn.



Figure 2.2 Language categories in Duolingo Application

3. After the chosen language is determined, the user could be asked to determine the learning target of the available choices. Next, there will be two lesson options. "Start from the beginning" and "Placement test."

If the user feel need to learn from the basics, The recommendation is to choose the option Start from scratch. But if users' basic vocabulary and sentence mastery are good enough, users' try the second option.

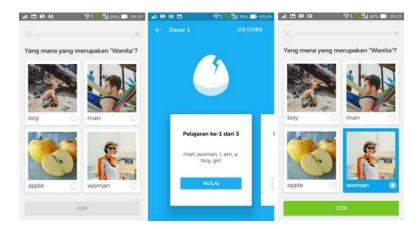


Figure 2.3 Basic level Duolingo application



Figure 2.4 Introduction Level Duolingo application

Each lesson consist of several questions that begin with an introduction to vocabulary which continues the arrangement of short sentences. For each correct answer, The user be rewarded a value that later be calculated as the final grade.



FIGURE 2.5 Duolingo Application's level

In advanced lessons, the format is more or less the same as the basic level. But at this level, there is no more vocabulary recognition. The students are faced with the tasks of compiling verbatim from the requested Indonesian sentence.

The authors of Duolingo skillfully apply gasification into their system in order to engage and motivate their users. They are shown as follows

 Reward: In Duolingo, lingot is a reward. Users can easily collect a dozen of lingots by completing their lesson or skill.

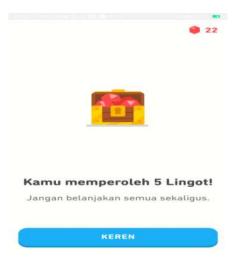


Figure 2.6 Reward in Duolingo Application

Leader-board: Which shows users how they are doing compared to their friends, these are some great motivators to help the users coming back and learning.

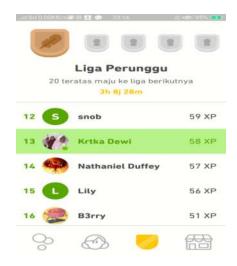


Figure 2.7 Duolingo's Leader board

3. Level-system: providing a way to track users' daily activity and compete with their friends, XP (experience point) also determines users' language "level", which displayed on their profile page and above their comments in discussions.



Figure 2.8 Level systems in Duolingo

4. Badges: DUOLINGO has some achievement token which are the skills a user has gained. They are displayed on the user profile. A badge is an excellent tool for making people feel invested in their studies.



Figure 2.9 Badges in Duolingo Application

3. Advantages of using Duolingo Application

- 1. With the Duolingo application students can learn English gradually, starts from the basics such as object recognition and properties.
- 2. Each task has several tasks that are very easy; students' can answer this task and will be guided until successful in the task, so we will be given the right answer.
- 3. Every day in Duolingo App will be given a task, students can set how many minutes of time to study starts from 5 minutes according to the time and student readiness (can be arranged)
- Duolingo will teach how to make the most appropriate sentence in the English context

- 5. Duolingo application will be taught how to pronunciation until truly fluent, and learn to hear English words and sentences.
- 6. Learning English in Duolingo is like an English tutor, because the learning process is gradual, starting from the basic to the top level.
- Some of the tasks available on Duolingo:
 - a. Basic learning, phrases, food, animals, pluralism, ownership (the introduction of common words that we often find and use every day)
 - b. Colors, conjunctions, questions, prepositions, use of date and time, family, etc
 - c. Employment, adjectives, information, place, object, community, travel, determinant, numbers, education, etc.
 - d. Sports, communication, art, health, politics, science, business, capital, events, attributes, and many other tasks.

From the researcher experience, the Duolingo application is truly the best English learning application from other applications. With the help of the Duolingo application as well as doing English tutoring, because there are enough methods and tasks available on Duolingo, so there are many English vocabulary obtained from Duolingo.

Description of the Duolingo application:

- System operating systems android, iOS, windows, and WinPhone
- Free use and installation

By using the Duolingo application and installing it on a mobile phone, so the student can learn English anywhere and anytime.

C. Previous Study

Based on what we learned in previous studies, we found several related articles about using the Duolingo application. The title is "The Use of Duolingo to Improve Students Vocabulary" by Addal Muddin student of Faculty of Education and Teacher Training. The results of the training activities use the Duolingo application as a medium to improve the Vocabulary of MtsN Bandar Aceh students. And researchers use the experimental Method with Post-Test and Pre-Test. The results of this research revealed the students were more motivated in learning; more skillful because the interest of learning increases; easy to understand the material; giving the opportunity to all students to get a fair turn in practicing the material; eliminate boredom inlearning; encourage the idea of new ideas; and facilitate students in remembering also practice the material in daily life day.

The second is Article by Ja'far Abdu Latief student of Faculty State Insitute for Islamic Studies (IAIN) Salatiga. The title is "The Implementation of Duolingo Android Application and Autonomous Learning to Enhance the Students' Writing Simple Sentences of tenth-grade students of SMK Bhakti Nusantara Salatiga". Second previous studies focus on how the implementation of Duolingo Android Application in enhancing the students' writing simple sentences. The

results of this research revealed the students got more idea after did the exercises in Duolingo. They also had repaired after using Duolingo. In learning by own-self, they felt free and interested to know about the materials of simple past tense.

The third is an article by Cecep Abdul Fatah student of faculty of Educational sciences Syarif Hidayatullah State Islamic University Jakarta. The title is "The Effect of Using Duolingo Application to Develop Students' Vocabulary Knowledge". This focuses on the effect of using Duolingo application on students' vocabulary knowledge in SMP Islam Taman Quraniyah Jakarta Selatan. And the researcher uses Quasi-experimental research. The results of this research revealed that Duolingo application can give a significant effect on students" vocabulary knowledge because the score of vocabulary test after the writer doing treatments is higher than before being taught by Duolingo application.

The difference in the previous studies mentioned above with this research is that the previous studies used different strategies and objectives, and the focus of the study was different from the use of Duolingo application for the first grade of MA At-Thohiriyah Ngantru. So the researcher hopes that this research will be better than the previous studies.

Because the Duolingo application is very useful as a teaching aid in the classroom, especially the use of the Duolingo application can help teachers in learning in the classroom. This is in line with Gerlach and Ely in Suaib (2015), seeing learning media not only in the form of tools and materials but things that allow students to gain knowledge. "Media, conceived are strangers, material, or even those who set conditions that allow students to acquire knowledge, skills, attitudes."

In general, media (learning) includes people, materials, equipment, or activities that enable students to acquire knowledge, skills, and attitudes. The output generated from these community service activities is that participants in this PKM activity can utilize internet technology, in this case, the use of the Duolingo application for language learning activities that are more creative, interesting, and innovative.