

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents the theories that suit to this research. Definition of vocabulary, teaching vocabulary, Duolingo application and explanation of teaching vocabulary using Duolingo application.

A. Vocabulary

Vocabulary is one of the materials learned by students from all levels of school in Indonesia. Have to master if they want to master English well. It is impossible to succeed in learning languages without mastering vocabulary. Vocabulary is a center of language and of the critical importance of typical language. Without sufficient vocabulary, the human cannot communicate effectively or express his ideas in both oral and written form. To support the speaker's interaction in communication, vocabulary becomes important because it can be used as a basic foundation to construct a word into a good sequence of the sentence. Therefore, students should have to obtain vocabulary mastery.

According to experts by Hocket (in Celce-Murcia and Mc Intosh, 1978: 129) states that vocabulary is the easiest aspect at a second language to learn and it hardly requires formal attention in the classroom. Hornby (1995:1331) defines "vocabulary as a list of words used in the book, etc, usually with definition and translation"

Communication can't run well because there is no good language using of communication. Communication cannot run well without mastering in vocabularies. So, Duolingo application can increasing vocabulary is one of the ways to make students have fun, relax, interested, in the learning process. So this way, there are some steps in this chapter that is what's the language, the function of language, vocabulary as language element, the teaching of vocabulary.

According to Finocchiaro (1974: 73), there are two kinds of vocabulary, namely active vocabulary and passive vocabulary. Active vocabulary refers to the words the student understands, can pronounce correctly and use them constructively in speaking and writing. On the other hand, passive vocabulary refers to the words in which the students can recognize and understand while they are reading or listening to someone speaking, but they do not use the words in speaking or in writing.

Based on the definition above, I conclude that the more vocabulary the learners have, the easier for them to develop their four skills (listening, reading, writing, and speaking) and learn English as the foreign language generally. Vocabulary is crucial to be mastered by the learner in order to understand the language. Vocabulary mastery is needed to express our ideas and to be able to understand other people's sayings.

Hornby (1995) as cited in Alqahtani (2015) defined the mastery of vocabulary as complete knowledge or complete skill. From that definition, mastery means complete knowledge or great skill that makes someone a master in a certain subject. Vocabulary mastery refers to the great skill in processing words of a language (Susanto & Fazlinda, 2016). It is an individual achievement and possession (Alqahtani, 2015). Due to that reason, the biggest responsibility of increasing knowledge is in the individual himself. The success in widening the vocabulary mastery requires their own motivation and interest in the words of a language. As in conclusion, vocabulary mastery is an individual's great skill in using words of a language, which is acquired based on their own interest needs and motivation. Vocabulary mastery plays an important role in the four language skills and it has to be considered that vocabulary mastery is one of the needed components of language (Susanto & Fazlinda, 2016).

B. Teaching Vocabulary

In this chapter review of related literature, the writer begins with what is language in our life and then what's a function of language itself, because language is a tool of communication. How to make relation or communication, that's because of language. We can express our ideas and feel by language or communication.

Teaching vocabulary is a crucial aspect of learning a language as languages are based on words (Alqahtani, 2015). It is almost impossible to learn a language without words; even communication

between human beings is based on words. Recent research indicates that teaching vocabulary may be problematic because many teachers are not confident about the best practice in vocabulary teaching and at times do not know where to begin to form an instructional emphasis on word learning (Berne & Blachowicz, 2008). Either teachers or students agree that acquisition of the vocabulary is a central factor in teaching a language (Walters, 2004). Teaching vocabulary is considered as one of the most discussed parts of teaching English as a foreign language. When the teaching and learning process takes place, problems would appear to the teachers. They have problems with how to teach students in order to gain satisfying results. The teachers should be concerned that teaching vocabulary is something new and different from the student's native language. They also have to take into account that teaching English for young learners is different from adults. The teacher should prepare and find out the appropriate techniques, which will be implemented to the students.

A good teacher should prepare himself or herself with various and up-to-date techniques. Teachers should be creative and be able to master the material in order to be understood by students and make them interested. The teachers have to know the characteristics of his\her learners. They moreover need to prepare good techniques and suitable material in order to gain the target of language teaching.

Improving students' vocabulary is an area of urgent need if we are to develop the advanced literacy levels required for success in school and

beyond (Biancarosa & Snow, 2006; Graves & Watts-Taffe, 2008). Vocabulary is also an area where teachers are asking for guidance on instructional approaches, strategies, and materials (Berne & Blachowicz, 2008). We believe that digital tools and media are available in most schools that teachers could harness now to improve vocabulary learning, tools that capture the interest of students and that provide scaffolds and contexts in which to learn with, and about, words more profitably.

C. Kinds of Teaching Technique for Vocabulary

a. Vocabulary Teaching Techniques in General

If the teaching of vocabulary is related to reading comprehension, then there are three views about the relationship between vocabulary development and reading comprehension. The intended views are: "The first view suggests that direct instruction make little differences in terms of vocabulary development, whereas the second view suggests that direct instruction in specific words is extremely beneficial. The third view suggests that vocabulary development will be enhanced if students learn to relate to new concepts to their existing concepts and background knowledge." (Nagy and Anderson, 1985 in Robert et al (1995).

From this view, it is clear that vocabulary teaching proposed by English teachers must consider students' vocabulary development during teaching and learning activities. In addition, English teachers

must be able to teach foreign or specific words that are tailored to students' abilities, when they read certain texts directly. In short, direct instruction in new vocabulary can be taught to students, if it focuses on relating it to students' background knowledge.

b. *The Techniques of Teaching Vocabulary at Senior High School*

In general, there are several techniques for vocabulary teaching. However, there are a number of things that most English teachers must remember if they want to present new vocabulary or lexical items to their students. This means that English teachers want students to remember new vocabulary. Then, it needs to be studied, practiced, and revised to prevent students from forgetting.

c. *Visual Techniques*

Concerning with the visual techniques, Gairns and Redman (1980) as cited by Marla, et al (1999: 12) says that "there are form visual techniques;" relia, pictures, and mime or gestures. "Realia means using a variety of real life, students in the class can also be applied to consider written material, students can also play what they read, or facilitate physical partners with specific words found in reading material. Students can check what they read, or associate physical truths with specific words found in passages".

Referring to the ideas mentioned above, Klippel (1994:115) implies that mime or gesture is useful if it emphasizes the importance of gestures and facial expression on communication. In essence, it can

not only be used to show the meaning of words found in reading but also in speaking activities because most are approved of communication. Verbal Techniques.

This technique pertains to the use of the illustrative situation, synonyms, opposites, scale, definition, and categories. More specifically, Marla, et al (1990:3) divide verbal techniques into four parts, among those are:

- a. Definition and illustration sentences, this technique the English teachers are expected to introduce a word in English through the use of another word in the same language.
- b. Synonyms and antonyms; Synonyms and antonyms are especially important in building new the vocabulary because learners are able to know vocabulary. Synonyms are words that have the same meaning as the unknown in a given sentence. There may be signals that identify the presence of synonym for the readers. They could be or, commas, dashes, and colons. Meanwhile, antonyms are words that have the opposite meaning of the unknown word in a given sentence. Signals which identify the presence of the antonyms for readers are instead, although, but, yet, and however.
- c. Scale; This technique is the presentation of related words in scales that include the combination of both verbal and visual techniques, for example, in term 32° Celsius, the degree sign is visual.

- d. Explanation; This technique explains the meaning and the use of a foreign word in the foreign language itself.

D. Testing Vocabulary

According to Thornbury (2002:129), the main reason for testing is that it gives us information about how well our students proceed in their learning of English. It gives useful feedback to both teachers and students. In addition, when the teacher announces her students that a vocabulary test is coming in a period of time, they will probably start to study the vocabulary harder than before, so it will have a positive effect. In general, testing helps to “recycle” vocabulary as well as to consolidate it.

However, vocabulary testing does not have to be always marked, we can prepare a test on vocabulary which will only revise words. The ideal model is to revise vocabulary from the previous lesson at the beginning of another lesson. Thornbury calls it *informal testing* (2002:130).

Heaton (1990:79) defines “tests of vocabulary are often connected with reading skills, here we can test everything together such as passive and active vocabulary, collocations, etc”. What is active and passive vocabulary? Passive vocabulary refers to words that learners understand but are not yet able to use. Active vocabulary, on the other hand, is the words that learners understand and use in speaking or writing. Testing vocabulary also occurs in placement tests or

diagnostic tests to find out students' level of knowledge or in achievement tests at the end of the school year, Thornbury (2002:130).

Example of a test for passive vocabulary, where students do not have to invent any words, they just circle the right letter:

Choose the best word to complete each sentence:

- 1) The flight attendant asked the passengers to _____ attention to the safety demonstration.
a. give b. devote c. pay d. lend
- 2) A severe hurricane in the South Pacific has _____ many lives.
a. claimed b. taken c. killed d. destroyed

Thornbury (2002: 131).

Example of a test for active vocabulary, where students have to invent the right

word which fits into each sentence.:

Choose the best word to complete each sentence:

- 1) The flight attendant asked the passengers to _____ attention to the safety demonstration.
- 2) A severe hurricane in the South Pacific has _____ many lives.
(Thornbury, 2002:131).

prevent this, we can use C-test where the beginnings of words are already given.

c. Matching

Through matching, we normally test the meaning of words, usually words of the opposite meaning. Students do not produce any vocabulary, they only match given words. This type of exercise is easier to design than multiple choice, if the student has matched the pairs correctly, can be matched without any knowledge because they are left Penny Ur (1996:72). This can be prevented by giving more options in one column than in the other one. There are also other possibilities than just matching words of opposite meaning. We can design a test where words and pictures are being matched, for example, fruit or means of transport, etc. Another modification can be putting words into appropriate category, for instance, fruit and vegetables:

Put these words into the correct column:

apple, grape, carrot, banana, cauliflower, spinach,

strawberry, potato, cherry, melon

Fruit Vegetables

Or students can match the right beginnings and endings of sentences according to their meaning:

Which beginning goes with which ending?

1 He planted a the stones and weeds

2 She picked b some beautiful red apples

3 She dug up c the seeds in three separate rows. Scrivener (1994:184).

d. Odd one out

According to Penny Ur (1996:72) Students have to determine which item does not belong among the others. The number of items can be various. This kind of exercise is easy to prepare, however, the teacher must know which words her students know so that they could find the odd one. It also tests only the meaning of words, but it can be both useful and interesting for the students.

Example:

Find the odd word: parrot hen eagle cow penguin goose sparrow

e. Writing Sentence

According to Penny Ur (1996:72) “students have to make sentences from given words. For example: healthy, violence, elephant, etc. This is a very interesting exercise which is worth trying but teachers must bear in mind that it will not be easy to mark such exercise easily. Moreover, the students must be at least pre-intermediate to be able to create such specific sentences. On the other hand, students will show if they can use a particular word in context. Example:

You need to eat more vegetables and less fat to be healthy.

f. Dictation

Penny Ur (1996:72) defined here the teacher dictates words or sentences to students. In my view, it mainly tests spelling but Ur claims that if someone knows how to spell a word he or she probably knows what this word means.

g. Sentence Completion

Students are given incomplete sentences containing words that we need to test. Their task is to complete these sentences so that they make sense. For example:

Finish the following sentences:

1. I feel depressed when...
2. I never have an appetite when...
3. It was a great relief when... Penny Ur (1996:72-74).

h. Definitions

The teacher gives her students a list of definitions of words she needs to test (Hughes 150). However, not every word can be easily defined and sometimes there can be more than one possible answer. Moreover, the definitions should be clear so that students understand the definition and can come to the right answer. I would recommend giving the pilot definitions to a teacher's college to try them first. I think that definitions are good to use because students have to be active and not just translate words.

Simple example of a definition:

It is an animal which likes bananas. (monkey)

F. Duolingo Application

In this chapter review of related literature, writer begins with what is Duolingo application. Duolingo is a free language learning app created by Luis von Ahn and Severin Hacker. This app is not only available in the web version but it is also available in Android, iOS and Windows Phone versions. In November 2016, the app provides 66 different language courses available in 23 languages; there are 22 more courses that are still being developed. English courses for Indonesian users are available and used by 1.39 million users. On the contrary, the Indonesian course for English speakers is still in the development stage. According to Vesselinov and J. Grego (2012), interactive exercises provide immediate feedback to help the student improve English skills on the spot. Continue to be motivated with rewards.

Students can earn virtual coins, open new levels, and see the value of fluency in increasing as students' ability to master new words, phrases, and grammar. Duolingo provides both written and sound learning, there is also speaking practice for more experienced users. Duolingo has a tree of capabilities whereby the user can complete a chapter later toward another branch of the tree. Users are hitting "experience points" (XP) after they complete a chapter, enough points

can raise the user level. The completed chapter will be golden, eventually, if the users rarely practice, the gold color will disappear and the user must complete the chapter. If the user has completed all the chapters in one course they can repeat the exercise (B. Settles and B. Meeder, 2016).

Duolingo can be used by teachers and students. Teachers can monitor the abilities and weaknesses of each student and help them improve their language skills (De Castro Ana Paula, 2016).

According to International Journal of English Linguistics “Duolingo, a free online language learning site, has as its mission to help users to learn a language while simultaneously using their learning exercises to translate the web”. Language is learned through translation with, according to developers, Duolingo being as effective as any of the leading language learning software. For translating the web, machine translation is not good enough and relying only on professional translators, far too expensive. Duolingo, we are told, offers a third way, with translation as a by-product of its language learning. The translation which will be, if as promised, almost as cheap as if done by machines and almost as good as if by professionals. Launched in June 2012, Duolingo boasts already at the time of writing 300,000 active language learners ready for the task. This article independently assesses the extent to which Duolingo, at its current stage of development, meets those expectations.

G. Teaching Vocabulary Using Duolingo Application

In any classroom, it is important to get students paying attention and listening. English is a compulsory subject that must be learned at all level. The first thing that students must know about the vocabulary we can express our idea in communication. According to the Rivers (1983) states that an adequate vocabulary is a vocabulary, we will be unable to use the structure and function but we may have learned for comprehensible communication. By using Duolingo the teacher introduces first to the students how to apply the media in vocabulary learning, besides that the teacher also as guide and guide in arranging student learning activity, so that the learning process run effectively and efficiently.

H. Learning Steps Using Duolingo

In the steps of learning using Duolingo application in the class, the teacher prefers a laptop or computer for learning activities. With computer teaching and learning activities will be more effective than using mobile phones. Duolingo application is an android based application, so before teaching the teacher must install the android device and Duolingo application first on the laptop or computer. Even one computer will make it possible to use Duolingo in class. For example, the teacher can project the screen and create interactive activities. Students can also bring their own devices if they have one, or the teacher can arrange group activities if the teacher has access to limited devices. When the teacher gives vocabulary material from the

Duolingo application, students are expected to write the vocabulary that has been given by the teacher, so students are easy to remember and learn again. Regarding the pronunciation of vocabulary contained in the application, the teacher can play vocabulary using a speaker or sound box, then the students repeat after the audio is played.

Each unit on Duolingo application contains a linear sequence of lessons, each made up of a set of chronologically ordered activities. Despite Duolingo claiming “a variety of speaking, listening, translation and multiple choice challenges,” (“Duolingo,” 2014) the vast majority of these activities involve translation of a sentence or phrase usually through selection from a word bank. The app’s home screen displays Duolingo’s language learning tree. The one to three circles in each row of the tree represent units that must be successfully completed before a user can move to the next row of activities. Units tend to be semantically or grammatically themed, with content oriented themes such as “animals” or grammatically focused themes such as “possessives.” Completion of all 68 units is equated with a high intermediate, level of proficiency according to Duolingo’s founder (Vesselinov, 2014).

Other exercises include verbal repetition of a spoken or written structure and dictation, which allows for the multispeed audio replay. New words give the student the ability to access various highlighted options, and most exercises offer an optional corresponding spoken text. All exercises offer immediate color and sound coded textual

animated feedback on correctness, and items answered incorrectly may be repeated later in the lesson. Each lesson allots a given a number of hearts, usually three to four, that are eliminated for each incorrect answer. When no hearts or opportunity to answer remain, incorrect responses result in restarting the lesson. Progress through a lesson is visually tracked by way of an incremental progress bar at the top of the screen.

Duolingo turns language learning into a game to make it more fun and effective. Students can learn languages for free while earning points for correct answers, racing against the clock, and leveling up. Bite-sized, personalized lessons help students retain content taught, and an independent study has shown that 34 hours of Duolingo is comparable to taking a language class at a university for 1 semester. Vesselinov, R. and Grego, J. (2012).

I. Previous Related Study

The study about using Duolingo application was conducted by Laila Mahmudah (2015) and Natanael Mauricio Méndez Bermudez (2017).

The differences between this research and these two previous research are Laila Mahmudah used descriptive qualitative approach and the field of her research was pronunciation. And, Natanael Mauricio Méndez Bermudez also used a qualitative approach. Her research was about showing the possible effects of using Duolingo as

a compliment for English lessons. Whereas, in this research, the researcher used the quantitative approach with a quasi-experiment type. The purpose of this research is to know the effectiveness of using Duolingo application in Madrasah Ibtidaiyah Darul Ilmi and how Duolingo can improve the students' vocabulary.

There was a significant difference in students' vocabulary by using and without using Duolingo application of the sixth grade at Madrasah Ibtidaiyah Darul Ilmi Banjarbaru. Using Duolingo application is effective with high category of Cohen's D Effect Size Category. Without using Duolingo application in control class, it was not better than using Duolingo application in experiment class.

Based on the result of the post-test, there are significant differences between the highest and the lowest score. The highest score of the test students' vocabulary who used Duolingo application was 100 with 5 students who got score 100. The highest score of the test of the vocabulary students who did not use Duolingo application was also 100 but only 2 students who got score 100. Then the lowest score of the vocabulary of students who used Duolingo application was 80. The lowest score of vocabulary students who did not use Duolingo application was 40.

The researcher also found a different mean score between the students who used and did not use Duolingo application. The mean score of the students who used Duolingo application is 91.4 it means

the vocabulary of students who used Duolingo application is in the excellent category.

Also according to Feifei 2014 (Natanael M.M.B, 2017, p. 26) Every day as teacher of English as a Foreign Language we are looking for new ideas to get students attention and what is more, to strengthen their enthusiasm for learning English, and this is a challenging issue in teaching, using the students' desire for learning, and a possible way to do this is the technology used by students on a regular basis, Duolingo could help us to engage the enthusiasm and desire of students to learn English into a useful tool to improve English as a Foreign Language in teaching and learning.

From the explanation above, it can be concluded that Duolingo application is one of the effective applications to improve vocabulary mastery for school students, and also Duolingo application gives positive impacts to the students.