CHAPTER I

INTRODUCTION

1.1 Background of the Study

English as an International language is spoken almost all over the world. Nowadays, English takes an important role as communication language used in many sectors of life such as, trading, bilateral relationship, science, technology, and many others. English has become the language used by many people all over the world to connect and share with another. Therefore, people should understand and master English in order to gain broader knowledge, information, and technology.

In learning a foreign language, vocabulary plays an important role. It is one element that links the four language skills of speaking, listening, reading and writing all together. In order to communicate well in a foreign language, students should acquire an adequate number of words and should know how to use them accurately. The acquisition of vocabulary would help people in gaining, understanding, and also enhancing the process of knowledgeable transferred for a better life. Better life here means that people will be easy to communicate to other people as written above and it can make the good relationship each other.

Vocabulary is one of English sub skills that must be taught to the students because vocabulary has an important role for all language skills. Wilkins in Thornburry (2002:13) states that without grammar very little can be conveyed, without vocabulary nothing can be conveyed. In other words, the first thing that has to be mastered by language learners in learning language is vocabulary. In listening, students' vocabulary influences their understanding toward teachers speech, class discussion, and other speeches. The words that they choose in speaking affect how well they deliver a message.

In reading, students' vocabulary affects their ability to understand and comprehend a text. In addition, dealing with writing, students' vocabulary also influences how clear they convey their thought to the reader. In conclusion, vocabulary takes an important role in equipping students to be able to communicate in English.

Based on the writer's experience during do the field program experience at SMA HKBP Sidorame Medan, the writer found that the students have difficulties in comprehending, reading, pronouncing, and writing the words . They also have difficulties in remembering the new words that they have learnt. It made them unable to answer the question from the book when the teaching learning process is doing. Based on this phenomena, the writer tries to find the effective solution to improve the students vocabulary by using Memrise Application in the teaching learning process.

Fadhilawati (2016 : 33) conducted a similar research which entitled "Learning and Riviewing Vocabulary Through Memrise to Improve Students' Vocabulary Achivement", she found that the implementation of Memrise as learning and riviewing vocabulary tool could improve the students' vocabulary achivement from the mean score 60.45 (Pre-test) to 86.27 (Post-test). In addition so that, she also states that student's resoponses are positive toward the use of Memrise as learning and riviewing vocabulary tool as reflected from the result of the questionnaire given.

Memrise Application is a media for the whole class that encourages students to study and review their vocabulary words, because we can indirectly remember new words and their meanings because they are always repeated. There are some reasons why the writer chooses Memrise Application as the media to improve their vocabulary mastery. First, Memrise Application can be used as one of interesting activities to review their vocabulary during the lesson. It can attract the students' attention and their involvement in the teaching and learning

process. Second, students can learn how to work and cooperate as a group and also learn how to appreciate each other. Third, Memrise Application can create an enjoyable environment. Actually memrise application is just like a game, some of students like playing game. Students can enjoy fun and joyful learning. Fourth, Memrise Application can help students revise their vocabulary and recalling something that happened. They can learn and revise their vocabulary in school, at home, at cafe or other places. By reviewing and revising Memrise may help students remember the language connected with it.

Based on the phenomena above the writer tries to find the effective solution to improve the students' vocabulary mastery through Memrise Applicaton in the teaching learning process. Therefore, this study will be important for SMA HKBP Sidorame Medan in order to improve the students' vocabulary mastery in the learning process.

1.2 The Problem of the Study

Based on the background of this study, the problem of this study is formulated as:

"Does memrise application media improve the students' vocabulary mastery of tenth grade sudents at SMA HKBP Sidorame Medan?"

1.3 The Objective of the Study

Based on the problem mentioned above, the objective of the study is to find out whether the using memrise application at tenth grade SMA HKBP Sidorame Medan.

1.4 The Scope of the Study

This study is limited of the use of memrise application in improving the students' vocabulary mastery at the tenth grade of SMA HKBP Sidorame Medan. In vocabulary the writer limited concrete and abstract noun.

1.5 The Significances of the Study

This study is mainly concerned for memrise application to improve vocabulary mastery. The result of the study definitely expected to gain importance both theoritically and practically to the tenth grade SMA HKBP Sidorame Medan in academic year 2019/2020.

1. Theoritically
1) The result of this study is beneficial of applying of theory pursuant to problems faced namely improving vocabulary mastery and using memrise application to the tenth grade students of SMA HKBP Sidorame in academic year 2019/2020
2) It can be used as the references for those who want to conduct a research and to apply teaching approach.
2. Practically
1) For the students in general, the study could enhance the students' motivation and improve the students' vocabulary mastery.
2) For teachers, the study gives input in enriching their teaching media to be implemented at the classroom.
3) For the school, the study enriches teaching media in the school.
4) For the writer, the study could bring her to a better understanding of improving students' vocabulary mastery and give practical contributions to her on how to improve students' vocabulary mastery through memrise application.

CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Theoritical Framework

As stated in the previous section, the aim of this research study is to improve students'' vocabulary mastery. Therefore, the discussion in this chapter will focus on the review of related theories underlying the study. It consists of two major sections, namely theoretical description and conceptual framework.

2.2 Vocabulary

As explained in the background of the study, vocabulary takes such a fundamental role in mastering English as foreign language well. There are some definitions of vocabulary proposed by some experts.

Hornby (1995:1331) mentions his definition of vocabulary as the total number of words in a language and vocabulary as a list of words with their meanings. Richard and Schmidt (2002:580) argue that a set of lexemes, including single words, compound words and idioms.

According to Ur (1996:60) vocabulary can be defined roughly as the words teacher teaches in the foreign language. The term "words" here means that the new item of vocabulary maybe more than a single word, for example, *father-in-law* and *police office*, which are made up from two or more words but express a single definition or idea. In other case there are also compound words called as multi-word idioms, for example *my stomach is butterflies*.

From the definition above, it can be concluded that vocabulary is a set/list of words of a particular language including single words, compound words and idioms that individual speakers of a language might use. This research will take at tenth grade students of SMA HKBP Sidorame Medan as the subject and English vocabulary as an object. Vocabulary in this study is limited into a set/list of English words which is related to the theme that should be taught in term of describe people, tourism place, and historical place.

2.2.1 Kinds of Vocabulary

There are many kinds of vocabulary according to some experts. Harmer (1991:150) distinguishes two kinds of vocabulary. The first kind of vocabulary refers to the stock of words which have been taught by the teacher or learnt by the students and which are expected to be able to use. While the second term refers to the words of which the students will recognize when they meet them, but of which they will probably not be able to pronounce.

According to Nation (2001:24), there are two kinds of vocabulary, they are perceptive and productive vocabulary. Receptive vocabulary refers to the words that native speakers and foreign learners recognize and understand but hardly ever use. It is used passively in either

listening or reading. Productive vocabulary is utilized actively either in speaking or writing. Listening vocabulary is generally larger than speaking vocabulary while reading vocabulary is relatively larger than writing vocabulary. Therefore it can be concluded that vocabulary can be presented in four units. They are listening vocabulary, reading vocabulary, speaking vocabulary, and writing vocabulary.

Reading vocabulary consists of the word found by people when they are reading. While listening vocabulary is the words that people hear and understand when they are talking to others or listening to radio and television. Speaking vocabulary includes the words people used in their daily life and conversation. The last is writing vocabulary that consists of the word people use in writing essays, reports, letter, etc.

In relation to kinds of vocabulary, Nation (2008:13-14) states that there are four kinds of vocabulary in the text:

1) High frequency words.

   These words are almost 80% of the running words in the text;

2) Academic words

   Typically, these words make up about 9% of the running words in the text;

3) Technical words.

   These words make up about 5% of the running words in the text;

4) Low frequency words.

These are the words of moderate frequency that did not manage to get into the high frequency list. They make up over 5% of the words in an academic text.

While Eckersley (1960:3-5) states that there are some indicators to learn vocabulary these are :

1) Noun

   The word that is related to name of things, people, or place.

2) Pronoun

   The word that replaces a person, place, thing, or idea. Pronoun can act as subjects or objects, and some can show possession.

3) Adjective

   The word that qualifies a noun by making its meaning clearer, fuller, or more exact.

4) Verb

   The word that expresses the idea of action or being that affirms that a person, or thing does something.

5) Adverb

   The word that can be added to a verb to make its meaning clearer, fuller, or more exact.

6) Preposition

   The word that is used with nouns or pronouns and show the relationship between the noun or pronoun and other words, often expressing abstract relationship of case or time of place.

7) Conjunction

   The word that is used to join words, phrases, or sentence.

8) Interjection

   The word that expresses a sudden feeling or emotion.

Table 2.1
Countable and Uncountable Noun

Countable Noun	Uncountable Noun
One pen, two pens	Oil, sugar
A ball, two balls	A cup of coffe, a spoon of sugar
A few jobs	A little work

Table 2.2
Kind of Verb

Kind of verb	To Infinitive	V1/Present	V2/Past	V3/Past Participle
Irregular	To give	Give	Gave	Given
Regular	To accept	Accept	Accepted	Accepted

Table 2.3
Changes Adjective into Adverb

Adjective	Adverb
Busy	Busily
Slow	Slowly

2.2.2 The Importance of Vocabulary

Vocabulary is the body of words that make up a language, and the importance of vocabulary in reading comprehension cannot be overstated. Without a good working knowledge of words and their meanings, both written and verbal communication will be poorly understood.

Teachers and parents can emphasize reading and verbal interaction with children to help them build a strong working vocabulary.

Thornburry (2002:14) states that vocabulary means a large collection of items. He adds that learning vocabulary is important because it enriches someone' knowledge of words. This implies that. The success of the learner in learning a language depends on not only the size of vocabulary but also vocabulary building.

Furthermore, Cameron (2001:72) believes that building a useful vocabulary is central to the learning of a foreign language at primary level. Building vocabulary means both understanding the meanings of words and learning to decode those words. Thus, the students can also enlarge their vocabulary mastery by using vocabulary building.

To show how important vocabulary is, Bromley (2004:3-4) states that vocabulary holds some important roles in teaching learning process. They are as follows:

1) **Promoting fluency**

Students who recognize and understand many words read more quickly and easily than those with smaller vocabularies.

2) **Boosting comprehension**

Vocabulary knowledge strongly influences comprehension. On a component analysis of comprehension, word meanings were found to make up 74% of comprehension.

3) **Improving achievement**

A large vocabulary means a large of conceptual knowledge which makes academic learning easier. Students with large vocabulary score higher on achievement test then those with small vocabularies.

4) **Enhancing thinking and communication**

Words are tools for analyzing, inferring, evaluating and reasoning. A large vocabulary allows for communicating in ways that are precise, powerful, persuasive and interesting.

In conclusion, realizing that the knowledge of vocabulary is very important, learners have to pay a greater attention to the vocabulary teaching. Teachers can emphasize the importance of vocabulary early in school and continue to provide students with opportunities to build word skills. One way to do this is to pre-teach key words in all subjects. This strategy helps students grasp concepts that contain terms with which they may be unfamiliar. Putting emphasis on root words, prefixes, and suffixes assist students in morphemic analysis, which combines this knowledge with the context to figure out a new words meaning. Multimedia tools are good ways to expose students to new concepts and enhance their desire to build vocabulary skills. If someone can master vocabulary well, he or she will be able to promote fluency, boost comprehension, improve achievement and enhance thinking and communication.

2.2.3   Vocabulary Mastery

Vocabulary is one of the language aspects which should be learnt. Learning is important because in order to be able to speak, write, and listen learners have to know vocabulary first. A person said to know "a word if they can recognize its meaning when they see it" (Cameron 2001:75). It means that in learning vocabulary learners have to know the meaning of it and also understand and can use it in sentence context.

According to John (2000:16), vocabulary is knowledge of knowing the meanings of words and therefore the purpose of a vocabulary test is to find out whether the learners can match each word with a synonym, a dictionary – tape definition, or an equivalent word in their own language. In learning vocabulary automatically they have to know the meaning of words themselves and can use it in sentences.

In brief, vocabulary mastery can be defined as a number of vocabulary (words) in a language which contains information about its meaning, form, and usage in context of communication. It is the basic knowledge that students should master first before mastering English. Vocabulary learning is a principal issue for English learning because it comprises the basic building blocks of English sentences.

The vocabulary mastery is not a spontaneous process which is easy to be done. The process of vocabulary mastery begins when someone is still an infant. Basically, the baby's first language comes from the mother tongue. They will master the vocabulary through the simple words by listening to the words which are uttered by someone else. It is known that English vocabulary learning cannot run successfully without English ability (English skills) because both of them are very important in English teaching and learning process The students cannot do well in comprehension without large vocabulary, for the passages and questions involve a range of words much wider than that of daily conversation.

To make the discussion clearer, Harmers' opinion can be added. In his book, Harmer (2001:16) says that there are some aspects that have to be discussed in vocabulary, namely: word meaning (synonym, antonym, connotation, and denotation), extending word use such as idioms, word combination or collocation, and the grammar of words which comprises noun, verb, adjective, and adverb.

1) **Meaning**

The meaning can be classified according to the form they attach to. It can be classified into three forms: lexical meaning, morphological meaning, and syntactic meaning.

Lexical meaning is the meaning that attaches to words as word. For example, the meaning of a building for human habitation that attaches to house is lexical meaning. Morphological

meaning is the meaning that attaches to morpheme. Morpheme is the smallest unit that carries information about meaning or function. And the meaning that attaches to the word arrangement in a sentence is the syntactic meaning.

A word meaning can also be defined by its relationship to other words. One should also know the denotation and connotation of a word in order to know the negative or positive meanings that occur in the word.

a. Synonym

The term synonymy derives from Greek: syn- + -nymy. The two parts mean "same and name". Synonymy deals with sameness of meaning, more than one word having the same meaning, alternatively the same meaning being expressed by more than one word. In other words, synonym is words whose denotation is the same but has different connotation.

Examples :

- Small   = little
- Big   = large
- Mothr and father   = parents

b. Antonym

Antonym is the opposite of meaning. It derives from Greek, "ant- and - nymy", the two parts mean "opposite + name". Antonym deals with oppositeness of meaning. Antonyms are not differentiated for formality or dialect or technicality; antonyms occur within the same style, dialect, or register.

Examples :

- Small   = big

- Fast   = slow

- Young = old

c. Denotation

Denotative meaning is called as some terms such as den notational meaning, cognitive meaning, conceptual meaning, ideational meaning, referential meaning, or proportional meaning. This is called denotational, referential, conceptual, or ideational because the meaning refers to a certain referent, concept, or idea from reference. Denotative meaning is also called cognitive meaning because the meaning concerns with consciousness or knowledge.

Examples :

- Vegetables are an <u>inexpensive</u>. (Cheap)

- Ben is an <u>adventurous</u>. (Courageuous)

- She recognized the lovely <u>aroma</u> of her mother's cooking. (Smell)

d. Connotation

Connotation is more complicated than denotation. Connotation is feeling and emotion that occurs within a word. Thus, it can be said that connotation is denotative meaning which is stretched. In other words, connotation is the feeling and emotion associated with a meaning.

Examples :

- "That woman is a *dove* at heart".

  Here the dove implies, peace or gentility.

- "There is no place like *home*"

  In connotatively, it most often refers to family, comfort, and security.

- "That woman is so *pushy*!"

Pushy refers to someone who is loud mouthed, insisting, and irritating.

2) Use

According to Nation (2001:1), there are some ways to draw the attentions to the use of words by quickly showing the grammatical pattern the word fits into (countable/uncountable, transitive/intransitive, etc.), giving a few similar collocates, mentioning any restrictions on the use of the word (formal, informal, impolite, only used with children, etc.), and giving a well-known opposite or a well-known word describing the group or lexical set it fits into.

3) Spelling

Spelling is the writing of a word or words with the necessary letters and diacritics present in an accepted standard order and an arrangement of letters that form a word or part of a word; the process of forming words by putting letters together.

According to Ur (1996: 60) there are some important points that should be considered when teaching vocabulary that is form (pronunciation and spelling). The learners have to know what a word sound is like (its pronunciation) and what it looks like (its spelling).

4) Pronunciation

According to Hewings (2004:3), pronunciation of a language is the main components of speech which combine together. These components range from the individual sounds that make up speech, to the way in pitch (the rise and fall of the voice is used to convey meaning).

Pronunciation can be said as the act of uttering with articulation; the act of

giving the proper sound and accent; utterance; as, the pronunciation of syllables of words; distinct or indistinct pronunciation.

It is a way in which language is spoken. It includes segmental feature, vowel, and the intonation patterns. The listeners are supposed to apply them well and correctly.

According to Ur (1996: 60), there are some important points that should be considered when teaching vocabulary that is form (pronunciation and spelling). The learners have to know what a word sound is like (its pronunciation) and what it looks like (its spelling). These are fairly obvious characteristics and the words will be perceived by the learners when encountering the items for the first time.

From the definitions above, it can be inferred that learners should master the words of the language because language consists of words. It is in order to be able to use the language approximately. Having mastered a large number of words, they will be able to express their ideas in the language approximately.

2.2.4 The Learning of Vocabulary

Vocabulary mastery is an important thing in order to master four major skills such as speaking, reading, writing, and listening. According to Wilkins as stated in Thornbury (2002:13), "without grammar very little can be conveyed, without vocabulary nothing can be conveyed."

Moreover, learning vocabulary of foreign language presents the learner with several challenges. As stated in Harmer (2002:2), the challenges are making the correct connections, understanding the foreign language between the form and the meaning of words, and discriminating the meanings of closely related words.

Learning vocabulary needs a process. In order to make an effective process, the learner should be in the effective condition of acquiring vocabulary mastery. Further, Thornbury

(2002:2) states that the condition should help learners to acquire a critical mass of words to use in both understanding and producing language. Moreover, it will enable them to remember word over time and be able to recall them readily. In addition, it can develop strategies for coping with gaps in word, including coping with unknown words, or unfamiliar uses of unknown words.

2.3 Memrise

According to Laxman and Naik (2016:55) "Memrise is a vocabulary learning website which exists in the form of web application as well as and Android and iPhone application free of charge". Memrise is a user-generated learning platform which uses flashcards as memory aids. It specializes in language learning, but also offers content on a wide range of other subjects. Memrise has more than 150 language courses across 25 languages. The app has over 35 million registered users. Memrise has been profitable since late 2016.

Memrise was founded by Ed Cooke, a Grand Master of Memory, and Greg Detre, a Princeton neuroscientist specializing in the science of memory and forgetting. The website launched in private beta after winning the Princeton Entrepreneurship Club 2009 Tiger Launch competition. On October 1, 2012, 100 users were allowed to sign up to test a non-beta version of the website called Memrise 1.0. As of May 2013, a Memrise app has been available for download on both the App Store (iOS) and Google Play.

In May 2017, Memrise was named as the overall Best App winner of the second edition of the Google Play awards. The Awards celebrate achievements of the developer community across the globe over the past year and recognise the best apps and games covering twelve categories. Selected by a panel of experts, the winners are evaluated on quality, innovation, and major launches or updates over the past year.

In July 2010, Memrise was named as one of the winners of the London Mini-Seedcamp competition. In November 2010, the site was named as one of the finalists for the 2010 Tech Crunch Europas Start-up of the Year. In March 2011, it was selected as one of the Techstars Boston startups

In late September 2012, the leaderboard on the website was temporarily suspended due to "extensive cheating". Specific users had been using bots and non-intensive mechanisms, such as celebrity photo memory courses, to achieve atypical scores that were not reflective of actual learning. In response, the administrators established a new leaderboard after revising the scoring loopholes

Memrise's platform seems simpler and easier to use, and there is a larger variety of courses over specific topics as well in various languages. This help the students to want to learn more words because it will give something that interesting them, with the vocab list. Knowing tons of words however don't help if the students don't know how to use them in a sentence, and that will help the students to put their vocab into grammatically correct sentences.

Another great thing about Memrise, is that the students can easy create their own courses. E.g. I found a blog full of great phrases and language, but can't retain just by looking at thousands of web pages. Therefore, the writer creates a course based off it, thus being able to easily see and review key words and phrases.

The spaced repetition reviewing is absolutely amazing- a bit annoying if the students have 1800 words to review after several weeks offline, but infinitely helpful. If the students come across a word, but don't use it within a few days, often it is gone. However Memrise knows perfectly when to review words that are difficult or easier for you, and it helps so much to retain.

So, altogether the writer preference lies with Memrise due to its interface, versatility, reviewing algorithm, and especially because it seems almost like a game so fun to learn.

2.3.1 How To Use Memrise

1. Create an account

Before create an account you have to make sure that you have downloaded the application before. You can download the application in Google Play store. Then instal the Memrise Application. Open the application then create an account or you can choose a username or sign in with facebook or Google account. It is best if you make a profile as your progress will then be saved in case you happen to change your devices. You can use your Facebook or Google credentials as well to login. The profile page is like a report card, informing you of how many words you have learned, what are the badges you have acquired, which learning level you are on, as well as leadership boards.

2. Choose a course

In the language section of the site alone there are courses in over 200 languages available, including invented languages like Elvish and Klingon. The course screen should roughly indicate how many hours it will take to complete. A course may be divided into levels so it is easier to manage. To choose a course, click to the 'Browse' button at the top of the site. You can then sort through courses by language or popularity or search for keywords. Choose English then click on 'Pemula or Bukan Pemula'.

3. Click on Menubar 'Mulai Belajar'

Then wait a moment, then click on 'Mulai Belajar'. Then this application will show the menu bar of each level and click the centre of the button.

4. Grow your vocabulary

After click 'Mulai Belajar', the menubar will show the list of vocabulary. Memrise use a garden as a metaphor for memory. When you start learning a course, the vocabulary items will be planted as 'seeds'. The vocabulary will be given over again. Start from the easy way, middle and more difficult. And there are always the audio pronounce for each vocabulary. As you are tested on them through typing and multiple choice tests, they be transferred from your 'greenhouse' (short term memory) into your 'garden' (long term memory).

The main page of Memrise looks like you are entering outer space, with multiple level expressed as planets. Each level has particular theme. One you enter a level, there are certain number of word and phrases which you need to master, before you head on to the next level. You go from one screen to the next as you answer the questions correctly. If you give the wrong answer, then it will just take more steps to clear a level as that word or phrase will be re-taught to you.

5. **'Water' your vocabulary**

Initially, the app explains the new words to you, by having an English translation along with a sentence using that word or phrase and robotic voice. Saying that word out loud. This is followed by multiple choice questions, audio quizzes, spellings, sentence building and hearing exercises. Each word or phrase will be presented in a question and answer format, till you master it. On the top right hand corner you will notice a symbol of a hand about to drop a seed – that is the start of the game for that particularword or phrase. Everytime you answer any question about that word or phrase correctly, you will see a plant emerging, then a leaf added, then finally, a flower blooming which signifies the end for that word. seeing a purple colour flower beside a word or phrase means that you have mastered it for that session.

Once an item of vocabulary is in your long term memory, it will need to be water (tested on) periodically. If you get the answer right in the test, you won't need to water it again very soon, and vice versa. Growing and watering items and creating mems will give you a certain number of points of points each level. You may get annoyed to see the same word or phrase being asked to you in different format. But in the long run, it help for these for these phrases to stay stuck. It would certainly help if you also write down and practice these words and phrases in a physical book as well. Learning a new language is a fascinating process and with apps such as Memrise, it becomes all the more fun as a teacher, we can also see the students achievement by their points. We can add our students or follow them by click on 'search' then write thes stuedents name.

2.3.2 Learning a Vocabulary through Memrise

Learning and reviewing vocabulary regularly is the process in determining students' achievement especially in learning language. Macaro (2001) argues that the students' should have more practice to have a good vocabulary acquisition. Besides, learning vocabulary in the classroom students should have time for reviewing the lesson at home. In this case, Memrise as online learning and reviewing tool uses spaced repetition method which store the students' memorized data and assess the knowledge according to this data, it would give benefit for them to have a long-term memory to what they have learned.

Furthermore, besides Memrise uses Spaced Repetition there are some other reasons why Memrise suitable for learning and riviewing vocabulary.

1. Memrise is Fun for the Student

Memrise is just like a game. Most of the students like playing a game, is it right? By applying Memrise in learning and reviewing vocabulary, the students will have a fun learning

experience. They can learn and riview vocabulary whenever and wherever they wanted. For examples : they can learn and review vocabulary in campus, at home, at cafe or other places. They can make time of learning and reviewing become play time activity. We all agree most of us will learn anything easily when we are in a relaxed situation and happy mood. By applying Memrise as a learning and reviewing vocabulary tool the students will learn vocabulary in a relaxed manner, they will be happy and have no stress about what they are learning because they are learning like they are playing. So it can be said that Memrise is a good choice for them to learn vocabulary because it turned learning vocabulary into a games where it grows a colorful garden of memory.

By using "Memrise" the students can learn a new word, think of it as planting a new seed in their memory. Then everytime they want to review that word, Memrise helps it to grow a little bit likes watering a little flower. By reviewing at the right time Memrise helps it grows as fast as possible and soon the students will have a glorious garden full of memories about what they have learned.

a. How the Students' Memory Garden Works in Memrise

The students need a regular and continuous vocabulary review. It is intended to keep and strengthen their memory. On Memrise, learning vocabulary was turned into a wonderful game in which the students grow a garden of memory. In this case, every word that will learn is assumed as a seed, and the students nurture it through reviews and tests until it grows strong. Takes root and blossoms into a flower in their Long Term Memory (LTM). After it in their Long-Term Memory, the students have to review to keep it fresh in the students' mind. There are 2 stages of learning vocabulary in Memrise' garden : 1) Learning new words and 2) reviewing long-term memories.

Stage 1 – The Students Learn New Words

When the students first learn a new word , their memory requires the most love and attention. Therefore, the lecture has to test it and remind it as often as possible repetition and test will be helpful for them in having a long-term memory about the words that they have learned. Therefore, in Memrise there were repeated tests for helping a new memory to finish growing. Than that word can be in the students' Long-Term Memory.

Stage 2 – The Students Review Long – Term Memories

If the students have totally grown a word in their garden of long-term memory, they don't need to give full attention to the word like they did when it first took place in their mind, but they still need to review it regularly. Reviewing words through "Memrise" will refresh and strengthen the students' memories and keeps them healthy forever. By doing a review to the word regularly the students will never forget what they have learned. In this case, Memrise hepls them by targeting to only those words that need to be reviewed and keeping the words that learned in their Long-Term Memory effectively.

2. Memrise is Community Learning

In Memrise there are various learning that the students can afford for free. There are many users that can share their idea or just learn from another user. So with Memrise community, the students can have a good experience about a wonderland multimedia of learning, in which videos, audio, usage, mnemonics, etymologies and much more bring the learning to life. Some principles in Memrise as community learning.

There are Millions of people used Memrise to learn languages. Those people are called as Memrise user. Through Memrise we can be smart pople together, learn what we want to learn in

an effective manner, share our ideas to help another user, have benefited from the ideas that other users have shared.

a. *Play works*

In Memrise there are three Watchwords of fun learning: discovery, curiosity, and surprise, those watchwords of fun learning are taking learning out of the classroom and turning it into a game. Therefore, learning and reviewing vocabulary through Memrise can become our students' favorite playtime activity.

b. *Our memory is a garden, not a storehouse*

Memrise teams believe that our memory is at the heart of how we see and imagine and feel about our world. It's colorful, vibrant and dynamic, not something grey store away at the back of our brain, or on your phone. They think memory is more like a garden than a storehouse. So they visualize each word we learn as a seed, growing into a plant;they represent our mind as a colorful garden, and our knowledge is then something we will want to tend and cultivate. To lovingly keep alive, not let wither as soon as we have passed an exam. Therefore, Memrise is an appropriate tool for the students' in learning and reviewing vocabulary.

c. *School shouldn't interfere with our education*

Some of Memrie team had a hard time in school, while others excelled: between them, they have flunked almost every imaginable qualification. All of them, though, feel let down by their formal education they believe learning should be something we choose to do, and that we should do it with our peers; and we reckon it is best done out of curiosity and joy, not fear and

ambition. It's with this commitment to learn for the joy of it that they're building Memrise: a pleasure-garden of learning for anyone who wishes to come and play.

d. Humans first and foremost

We cannot ignore that technology has an important role in this digital era. Memrise is one of educational technology is appropriate for or students because Memrise' team commit to use technology to make the users (human) become smarter, more curious and independent by combining science, technology to help the users grow their mind. They have a belief that humanity is more wonderful that technology. Therefore, they make human or the users become their priority and they don't agree to any technology that make the users dependent, ignorant or addicted to something meaingless.

2.3.3 The Advantages and Disadvanteges of Memrise Application

2.3.3.1 Advantages of Memrise

Starting with the advanteges the writer must say that the best thing about it is that it's free.

Secondly, it is very easy to use thanks to its very straightforward and colorful layout. Everything on our dashboard is very well organized and we know exactly where to find what we need in case we have filled our profile with a lot of courses and feeling lost. With everything pinned on the dashboard it's a piece of cake!

Another thing that writer like about the site is that we learn by playing. We can plant and water your flowers (words) and you can remember all the items that the students have learned in their own creative and illustrious way.

Furthermore, as with the previously presented language learning sites, Memrise too has its own mobile phone app that allows the students to learn on the go, available both for Android and iOS.

Last but not least, allowing you to create their own language course make sit even more awesome. As long as they know what you are doing!

2.3.3.2 Disadvantages of Memrise

There are, of course, drawbacks to the site as well. First of all, it is a flashcard-based game and thus their learning does not reflect real-life learning. It does not provide the students with the opportunity to practice speaking, extensive writing, listening and reading. The writer is not aware if this is what the site intends to do though, but the writer can tell the reader that what it focuses on now is memorizing vocabulary.

Moreover, and although the writer also included it in the advantages of the site, creating their own course can also result in not being very trustworthy. Anyone can do it and you might end up learning something completely different from what you expected.

2.3.4 Kinds of Language Application

1) Duolingo

Louis Von Ahn (2011) is a founder of Duolingo Application. Duolingo is a freemium language-learning platform that includes a language-learning website and app, as well as a digital language proficiency assessment exam. As of October 2018, the language-learning website and app offer 81 different language courses in 37 languages. The app has about 300 million registered users across the world.

2) Mango Language

Mango Language is an online language learning resource based Farmington Hills, Michigan, Jason Teshuba, Mike Teshuba, Ryan Whalen and Mike Goulas founded the service in 2007. Jason Teshuba serves as the CEO of Mango Languages. Mango Languages has 64 foreign language courses. Additionally, the service offers English lessons in 17 languages and specialty courses to teach cultural differences. Courses are accessible from a web browser or an app. I 2013, Mango Languages earned 7.9 million dolar in revenue.

3. Mondly Languages

Mondly is an EdTech company that developes a freemium language learning platform which includes website and apps with free and paid courses for 33 languages. The company also offers lessons in virtual and augmented reality. (Alexandru Iliescu & Tudor Iliescu 2013).

4. Rosetta Stone

Rosetta Stone is an education technology software company that develops language, literacy and brain fitness software. Best known for its language-learning products, in 2013 the company expanded beyond language into education-technology with its acquisitions of Livemocha, Lexia Learning, Fit Brains, and Tell Me More (Rosetta Stone Inc 1992).

5. Cuda

The CUDA platform is designed to work with programming languages sucas C, C++, and Fortran. This accessibility makes it easier for specialists in parallel programming to use GPU resources, in contrast to prior APIs like Direct3D and Open GL, which required advanced skills in graphics programming. Also, CUDA supports programming frameworks such as Open ACC and Open CL. When it was first introduced by Nvidia, the name CUDA was an acronym for Compute Unified Device Architecture, but Nvidia subsequently dropped the use of the acronym (Ian Buck 2006).

2.4   Previous Research

There were some previous researches on the benefit or impact of Memrise in education field especially in learning language which gave the writer motivation and contribution to do the research or write her publication especially in the field of improving the students' low vocabulary by using Memrise such as the first previous study is entitled "Improving student's mastery of Irregular Verb by using Memrise Application at the tenth grade of MAN Sidoarjo" was conducted by Rosydah Elly Cholifatur (2018) .

It has the similarities between previous study and writer's study. Firstly, the previous study and the writer study are about using Memrise. Secondly, the research design of previous study and writer study is Classroom Action Research. Thirdly, the previous study and the writer are aimed to the tenth grade.

But there are some differences between previous study and writer's study. Firstly, the previous study is focussed in improving student's mastery of Irregular verb. While the writer will focus in improving student's mastery of vocabulary. Secondly, the sample location is different. In previous study is focussed in MAN Sidoarjo while the writer's study will focuss in SMA HKBP Sidorame Medan.

The second previous study is entitled "The Use of Memrise to Learn Vocabulary and Pronounciation for Junior High School" was conducted by Hadfina Liislami Mala (2018). The similarity between the previous study and the writer's study is about using Memrise, then learning about vocabulary.

Beside it, there are some differences between previous study and writer's study. Firstly, the previous study is aimed to discuss the use of Memrise Application as teaching media to reach educational purpose in build up students vocabulary. While the writer is aimed to improve

students vocabulary mastery through Memrise Application. Secondly, the previous study is focussed on learning vocabulary and pronounciation. While the writer will only focus on vocabulary. Thirdly, the location and sample is different. Previous study is focussed in Junior High School students, while the writer will choose class X as the sample of writer study.

The third previous study is entitled "Pilot Study for Use of Memrise Application by Korean Junior College Students Studying EFL Vocabulary in a Blended Learning Context" was conducted by Kent and Sherman (2013). There are some similarities between previous study and writer's study. Firstly is about using memrise application. Secondly, the previous study and writer's study is focuss in increasing the student's English vocabulary. Thirdly, the previous study and the writer's study is using quantitative and qualitative data.

But there are some differences between previous study and writer's study. Firstly, the sample and location is different. In previous study is focussed in Junior high school at the seventh grade while the writer's study will focuss in Senior high school at the tenth grade. Secondly, the previous data used questionnaire and interview for the instrument, while the writer's study use questionnaire and test for the instrument.

The fourth previous study is entitled "Memrise has positive impact on the Student' Perceptions of Learning Latin Vocabulary and on Long-term Memory of Words" has proved by Walker (2016). There are some similarities between previous study and writer's study. Firstly is about using memrise application.

Beside it, there are some differences that found in previous study and writer's study. Firstly, the previous study is focussed in increasing the student's Latin vocabulary. While the writer will focus in increasing English vocabulary. Secondly, the previous study used

questionnaire, test, and interview for the instrument, while the writer's study will use questionnaire and test.

The fifth previous study is entitled "Using Memrise in Legal English Teaching", was conducted by Aleksandra Luczak (2017). The similarity between previous study and writer's study is about using Memrise Application.

Beside that, there is difference between previous and writer's study. Firstly, the aim of the previous research was to investigate the students' opinions about memrise as a tool which might facilitate individual learning of the specialist language. While, the writer's study is to improve students' vocabulary mastery in English.

The sixth previous study is entitled "Measuring the Effectiveness of Using Memrise on High School Students' Perceptions of Learning EFL", was coducted by Masoud Azizi Abarghoui and Saeed Taki (2018). There are some similarities between previous study and writer's study. Firstly, the previous and the writer study about using memrise application at the tenth grade. Secondly, the previous and the writer use questionnaire and test for the instrument.

 Beside it, there are some differences between previous study and writer's study. Firstly, the previous study used experimental class for the research design. The class is divided in to two namely, control class and experimental class. While the writer will use classroom action reserach as a research design. It will use cycle. Secondly, the sample location is different. In previous study is focussed in Senior High School in Yazd Iran. Then the writer's study is focused in SMA HKBP Sidorame Medan.

The seventh previous study is entitled "Student Perception of Mobile Learning of High frequency Vocabulary Using the Memrise Application" was conducted by Jacob T. Reed and

Daniel Hooper (2018). The similarity between previous study and the writer's study is about using Memrise in studying vocabulary.

But there some differences between the previous research and writer's study. Firstly, the objective or the aimed of previous study were to analyse and evaluate the use of Mobile Assisted Language Learning (MALL) in studying high-frequency vocabulary taken from the NGSL (New General Service List). While the writer will improve the students vocabulary mastery through Memrise. Secondly, previous study aimed used questionnaire and interview for instrument, while the writer's will use questionnaire and test for instrument.

The eight previous study is entitled "Learning and Riviewing Vocabulary Through Memrise to Improve Students' Vocabulary Achivement" was conducted by Dian Fadhilawati (2016). It has some similarities between the previous study and the writer's study. Firstly, the previous study and the writer's study is about improving students' vocabulary by using Memrise Application. Secondly, the research design of previous study and the writer's study is using classroom action research. Thirdly, the instrument of collecting data between previous study and the writer are test and questionnaire. But it has difference between previous study and the writer's study. The previous study is aimed to the students of Faculty Agriculture and Animal Husbandry at the Islamic University of Balitar, while the writer will do the research to the senior high school at tenth grade.

2.5 Theoritical Framework

Vocabulary is one of the essential parts of language which are taught for language learner. Wilkins in Thornburry (2002:13) states that without grammar very little can be conveyed, without vocabulary nothing can be conveyed. In other words, the first thing that has to be mastered by language learners in learning language is vocabulary. It is known that vocabulary

mastery supports the mastery of four language skills. All of those skills will be easily reached if the students understand the meaning of the words or vocabulary well. Therefore, vocabulary is very important in teaching English.
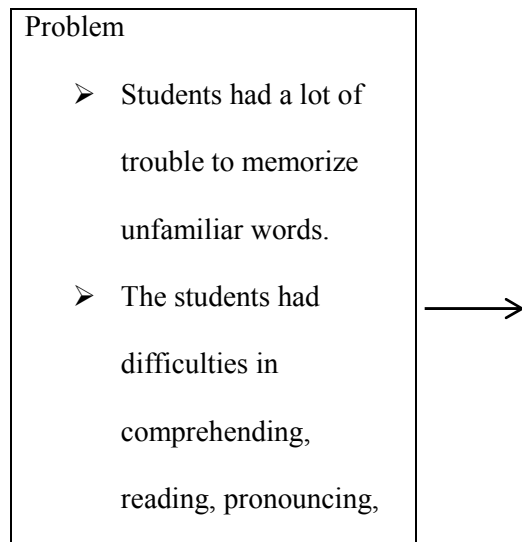
As has been stated in Chapter I, the tenth grade students at SMA HKBP Sidorame Medan have main problems which are related to vocabulary skills. They still having a lot of trouble to memorize the unfamiliar words that they heard or read in the text. They had difficulties in understanding or comprehending the meanings of unfamiliar words.

Based on that fact teachers have to choose the best way, approach or technique, or media which is going to be used when teaching vocabulary. Application can be modified into attractive teaching aids and the students will be motivated as well. Memrise application is still rarely used in learning vocabulary. With Memrise application the students will create a sense of curiosity, how does it work, what are the advantages, is it interesting or not. So that, students will study carefully and they will feel a different atmosphere, yet still fun. Memrise application can be used as one of interesting activities to review their vocabulary during the lesson. It can attract the students' attention and their involvement in the teaching and learning process. Students can learn how to work and cooperate as a group and also learn how to appreciate each other. Memrise application can create an enjoyable environment. Students can enjoy fun and joyful learning. Memrise application can help students revise their vocabulary and recalling something that happened in the game. It may help students remember the language connected with it. Because of that students will become more active in the classroom. The teacher can also increase the students' spirit and motivation by giving a reward for winner of the game. Therefore, Memrise application that serves many attractive and fun learning is proposed to help the teacher in teaching vocabulary.

Based on the theories and all about Memrise application and vocabulary mastery, the writer believes that by using Memrise application in learning process the students' motivation, attention, and enthusiasm will be stimulated and the classroom environment will be conducive for studying so that the quality of teaching-learning process will improve. Then finally, the vocabulary mastery of the student in this case senior high students will be improved. The conceptual framework could be described as follows :

The conceptual framework can be shown in this following :

TEACHINGVOCABULARY

Problem
➢ Students had a lot of trouble to memorize unfamiliar words.
➢ The students had difficulties in comprehending, reading, pronouncing,

and writing the words.

1. Planning :
   a. Teacher arranged lesson plan about the vocabulary.
   b. Teacher prepared the media related to the material of vocabulary.
   c. Teacher prepared the instruments for collecting data, vocabulary test.

2. Action
   a. Teacher introduced Memrise Application and explain the material.
   b. Teacher applied the Application.

4.Reflection

The writer would be an observer to analyze and evaluate teaching learning process in cycle 1.

3. Observation
   a. The students' activity answer the question.
   b. The students' response during the teaching learning process.
   c. The students' vocabulary achievement.

ΣX standard achievement > 75
Success : Stop

ΣX standard achievement < 75
Unsuccess : Continue

From the conceptual framework above if the grade is still low or most of the students still get under 75 score it means the writer will give the treatment in the next cycle or cycle two with the same test to know students achievement.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

The research design used in this study was Classroom Action Research (CAR) because it occured in the real classroom, it was called CAR. Arikunto stated that CAR is viewed as a develop to improve the quality of teaching learning ability in the phsyicall classroom. Beside of solving diagnosed problems in conditional classroom activity, CAR also helps the teacher through any new methods, skills, and strategies through pair teaching between the researcher and the teacher as collaborative study. It means that this method can help quality of teaching learning ability and solve real problems in the classroom through new methods, skills, and stretegies through collaborative between researcher and teacher.

Carr and Kemmis in Burns (2010:5) argue that action research is a self-reflective study conducted by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which these practices are carried out.

Meanwhile, according to Elliot in Burns (2010:5) states that action research is a study of a social situation with the view to improve the quality of the action in it.

3.2 Population

According to Burns (1990:62) "Population is an entire group of people or objects or events which all have at least one characteristics one common, and must be defined specially and unambiguously".

The population of this study was the students of SMA HKBP Sidorame Medan which is located at Jl Sidorame Barat 2, Medan Timur. The writer selected all the students of SMA HKBP Sidorame Medan namely all the students of the tenth grade.

3.3 Sample

McMillan and Schumacher (1984:32) say that: "Sample is a group of subjects selected from the population". The sample of this study was all the students of the tenth grade students at SMA HKBP Sidorame Medan. They consisted of 25 students.

3.4 The Instrument of Collecting Data

The instrument for collecting quantitative data in this study was collected by vocabulary test. It was used to know the student's vocabulary achievement. The students were allowed to use the dictionary. The qualitative data was collected by questionare sheets.

1. Vocabulary test

These vocabulary tests were utilized to assess student's vocabulary mastery. The vocabulary test through memrise application that consisted of fill in the blank, and meaning words as many 20 items. The memrise application given related to the topic that discussed together.

2. Quetionnaire sheets

Questionnaire sheets are technique of data collection by giving a group of question or written question to the respondent that need to be answered. Questionnaire is the efficient data collection if the writer knows exactly what variable is needed to measure and know what the writer expects

from the respondent. Questionnaire is started from the general to the specific. The function is to strenghten the data by the right answer of the respondent about something that already happened and done in the respondents' class and environment.

3.5 The Procedure of Collecting the Data

The classroom action research was done through cycle process which consisted of four steps, namely planning, action, observation, and reflection. The procedure of this study was conducted by using two cycles. Each cycle consisted of two meetings, so there were five meetings. Each cycle was divided into five steps, namely planning, action, observation, and reflection.

3.5.1 Cycle 1

1. Planning

In planning phase, the writer shared information. This phase was an arrangement for doing something. In planning it was considered everything that was related to the action that was done and it prepared everything that was needed in teaching and learning process. The activities that are done in planning, as follow :

a. Teacher arranged lesson plan about the vocabulary.

b. Teacher prepared the media related to the material of vocabulary.

c. Teacher prepared teaching material of vocabulary through Memrise Application.

d. Teache prepared the instruments for collecting data, vocabulary test.

2. Action

This phase of action means the process of activity that was done. In this phase the lesson plan was discussed and implemented by the writer. In implementing the action, the writer as an

English teacher acted as observed all the activities that happened in teaching learning process. This phase hopefully could solve the student's problem.

The activities of action such as :

1. Teacher introduced Memrise Application

2. Teacher explained the material about vocabulary through Memrise Application.

3. Teacher gave the vocabulary test.

3.   Observation

In this phase, the writer as an observer observed CAR process of learning procedure text writing skill through demonstration technique. The observer also observed students' activity in the clasroom. The important aspects in observation were sources data, the instrument used in collecting data, and the technique for data collection. When observing, the writer as an observer should notice and make documentation all of activities in the classroom. It regarded on class situation, students' response, the writer's performance, etc. It aimed to know whether there was any improvement in the first cycle or not.

The observation checked by some steps as follows:

1. The students' activity answer the question.

2. The students' response during the teaching learning process.

3. The students' vocabulary achievement.

4.   Reflection

The writer was an observer analyzed and evaluated teaching learning process in cycle 1. Reflecting phase was the last phase in one cycle. The aims of this phase were to reflect the data from the implementation of the action and to know whether the action was successful or not by appropriating the result of the observing phase with the criteria of success.

3.5.2 Cycle II

If the result of the first cycle was satisfy pointed by reaching the criteria of success, so there would not be the next cycle. Meanwhile, if the result of the action did not reach the criteria of success, the next cycle needed to be conducted. It should be moved to the next cycles or cycle 2. The cycle would be applied based on the result of the first cycle.

3.5.3 The Validity of the Test

The validity of test is to show how well the test that the students used. In this validity we could know that the test suitable to use as the mode of teaching or not. It proved from the students respond, after the teacher applied the memrise application media in the classroom. The most important was to make sure that memrise application already good as the media in learning vocabulary.

Table 3.5.3 Table The Validity of the Test

Intonation	Test Item	Kind of Test	Score
Concrete Noun	11	Multiple choice and arrange word	55
Abstract Noun	9	Multiple choice and arrange word	45
Total Score			100

3.5.4 Scoring System

To evaluate students' vocabulary achievement, the writer gave 20 items question for each cycle. The writer who acted also used score rank from 0-100 by counting the correct answer.

The correct answer was scored 5 while the wrong answer was given 0 by applying this formula :

$$S = \frac{R}{N} \text{ x } 100 \text{ \%}$$

Notes :

S = Score of test

R = Number of the correct answer

N = Number of test items

To categorize the students who got up to 75 was calculated by applying the formula :

$$P = \frac{R}{T} \text{ x } 100 \text{ \%}$$

Notes :

P = Percentage of students who got the point

R = The number of the students who got point up 75

T = The total number of students who did the test

3.5.5 Technique of Collecting Data

The writer collected the data by using quantitative and qualitative data. The qualitative data would be analyzed from questionnaire test. Quantitative data would be analyzed from vocabulary test. To know the mean of the students' score of assessment the writer applied on the formula :

$$X = \frac{\Sigma x}{N} \text{ X } 100\%$$

Notes :

X   = The mean of the students' score

Σ X = The total score

N   = The number of the students

After getting mean of the students' score per actions, the writer identified whether or not there might have students' improvement score on vocabulary comprehension from pre-test up to post-test score in cycle 1 and cycle 2. In analyzing that, the writer used the formula:

$$P = \frac{y1 - y}{y} \; x \; 100 \; \%$$

Where :

    P : Percentage of students' improvement

    Y : Pre-test result

    Y1 : Post-test 1

Where :

$$P = \frac{y2 - y}{y} \; x \; 100 \; \%$$

    P = Percentage of students' improvement

    Y = Pre-test result

    Y2 = Post-2

3.6 The Procedure of Analyzing Data

The procedure of analyzing data conducted by administrating pre test and post test in the fifth meetings. Each cycle has four steps, namely planning, action, observing, and reflecting. The procedure of analyzing data were :

1) Scoring the students' test

2) Tabulating the score from the lowest to the highest

3) Comparing the students'score between cycle I and cycle II

4) Calculating the percentage of the students' score

5) Making the conclusion.