

CHAPTER I

INTRODUCTION

1.1 The Background of the Study

There are so many languages in the world. One of them is English. The English language is the most commonly spoken. Nowadays English is used as an international language to communicate effectively with people from another country. It means that we need to learn English. English is rapidly becoming a global language and has made English a truly international language because no other has spread across the world.

In learning English there were so many things we need to know namely the skills in English. Students must master the four English skills when studying like listening, speaking, reading and writing. In order to know them, Students needed vocabulary to help them improve all the skills. People couldn't speak English without words. People who had a large vocabulary speak more fluently than those who only had a small vocabulary.

English is a problem faced by some students. Students encountered difficulties because they did not practice speaking English outside the classroom, used their native language in English classes, and lacked motivation to speak English. Having the small vocabulary also became the challenge in speaking. They wanted to speak but didn't know the word in English. Therefore they needed to master vocabulary so they could communicate in English with other people.

English vocabulary was different from Indonesian in terms of form, including pronunciation, spelling, meaning and use of words. In addition, the way

the word pronounced was quite different from the way it was written. Therefore, people especially students who study English often get difficulties in learning vocabulary. Learning a word doesn't mean only memorizing it, but knowing what it means and how to use the language. Knowing that vocabulary was one of the language components that must be mastered, it was better to learn and master vocabulary from an early age so that learners can communicate easily in English.

Vocabulary is a collection of words and it's a part of a particular language that used to compose sentences. Lubis and Rambe (2021:1) state that vocabulary is inevitable role in learning foreign language. In order to speak English fluently, we need to have variety of words. How vocabulary must be learned and acquired in the context of a foreign language is a necessary question further research. For this reason, teaching vocabulary has recently become an important topic for many EFL practitioners around the world. Vocabulary played crucial part in one's foreign language learning and language proficiency that can affect how well learners speak, listen, read and write.

One of the junior high school in Medan, SMP Gajah Mada had good reputation. In fact, there were problems faced by the students, such as English proficiency. When the researcher taught English there, she found that students' skills were still low and efforts were needed to increase the students' vocabulary. Students had difficulty in speaking or writing because they have limited vocabulary. However the researcher realized that students have the potential and opportunity to improve their vocabulary. As the teachers, we need strategy, skill, or method to positively influence and improve vocabulary learning.

Based on preliminary research in SMP Gajah Mada Medan on grade nine, the researcher found that the students hard to memorize the word with conventional method. Some students were still lack of vocabulary. Many students get bad score when they were given the test. Because of it, the problem must be solved by giving the treatment. There are some methods to do, like using game when teaching learning process through mobile phone.

Table 1.1 The Results of Preliminary Research

NO	Students' Initial	Score of vocabularyTest
1	AA	73
2	AS	60
3	CYM	70
4	DV	50
5	DE	55
6	DS	65
7	IS	59
8	JS	60
9	JU	65
10	KSK	67
11	KAP	70
12	KH	54
13	MAZ	63
14	NCP	60
15	OSP	80
16	RDT	61
17	SRM	62
18	SYA	58
19	SA	60
20	TAB	59

In order to motivate students to learn, teaching-learning activities need to employ variety of strategies. Game was used to help students to learn vocabulary. One of them was scramble game. Since the teacher only asks students to complete worksheet exercises, students had difficulties recalling language. As a result, the teaching-learning process becomes boring, and the students only pick up a small number of vocabulary words. As a solution, The researcher offers word-scrambled games as a way to teach vocabulary. Using word scramble games improved students' vocabularies. Additionally, word-scramble activities might increase students' enthusiasm in learning. This statement was supported by Lube and Nuraeni (2020:110) states that the scramble method is one of language games. Basically, language games are activities to acquire certain skills by encouraging. The game was also able to optimize students to think more creatively to define and construct a new object or structure so that they can increase knowledge and understanding because students are active in the game. The accuracy and speed of thinking in answering questions was one of the keys to the game in the scramble learning method.

Teaching vocabulary by using scramble game can be done in mobile phone through application. Web 2.0 tools like Kahoot, Quizlet, Edupuzzle, and Quizizz are some of the more popular educational program. One of the educational programs that uses the gamification concept was Quizizz. It contained some interesting features including avatars, music, rankings, and a theme which make the students felt like they were playing a game while learning. A gamified online program called Quizizz assisted students in measuring their understanding and learning progress. Each student's question order in Quizizz was random. To give

students more practice, teachers could also assign homework using Quizizz. Each question should have two to four alternative responses and be multiple choice. Quizizz was a free, user-friendly online tool that helped teachers in evaluating students' language skills. This game was effective and enjoyable in increasing student's vocabulary achievement.

Based on the explanation above, the researcher conducted a research entitled “ The Effect of Scramble Game by Using Quiziz Application on Student's Vocabulary Mastery at Nine Grade of SMP GAJAH MADA MEDAN.”

1.2 The Problem of the Study

Based on the background of the study above, the problem of the study is

“ Does the use of scramble game by using Quiziz application affect the student's vocabulary mastery at SMP Gajah Mada Medan ? “

1.3 The Objective of the Study

The objective of the study is to find out whether using scramble game by Quiziz application affect the student's vocabulary mastery.

1.4 The Scope of the Study

There are many methods and techniques of teaching vocabulary. For instance, game, picture, mind mapping, language game, authentic material, matching with word defenition, scramble game, pass the parcel game, etc. In this study, the problem is limited on student's vocabulary mastery by using scramble game in Quiziz application. There are 8 part of speech, like verb, noun, adverb, adjective, pronoun, conjunction, interjunction, preposition.

The researcher chooses verb, noun, adverb, adjective. There are some types of application, they are desktop application, web application, mobile application. The writer focuses on mobile application by using scramble game In Quiziz Application.

1.5 The Significances of the Study

The result of this study is expected to give some benefits.

1.5.1 Theoretically

The result of this study can be used in English teaching learning process especially to increase student's vocabulary mastery, to support the existing theories andn empirical evidence of the working knowledge and principle of English language teaching.

1.5.2 Practically

a. For teacher

The writer hopes this study can inspire English teachers, especially in teaching vocabulary. They can use scramble method to increase student's vocabulary mastery.

b. For students

By using scramble game in Quiziz Application, it can help students more active and think creatively. This study is used application so it won't make students bored to learn new English vocabulary.

1.6 The Hypothesis

Based on background of the study, the problem can be answered by the following hypothesis:

1. Alternative Hypothesis (H_a)

There is a significant effect of scramble game by using Quiziz application on student's vocabulary mastery

2. Null Hypothesis (H_0)

There is no significant effect of scramble game by using Quiziz application on student's vocabulary mastery.

CHAPTER II

REVIEW OF LITERATURE

2.1 Theoretical Framework

The research looked into how the Quiziz application with scramble method improve student's vocabulary mastery. This theoretical aimed to provide clear concept that applied in this study. In order to support this study, the researcher offers a few ideas that were relevant to it.

2.2 Vocabulary

Vocabulary is the basis of language proficiency and serves as the foundation for how well learners speak, listen, read, and write. Multazim, and Hudayah (2019:23) say that vocabulary is a list of targeted language words. Vocabulary is the glue that holds stories, ideas, and content together and making comprehension accessible. Vocabulary plays significant role In learning every languages. As in English, to master the four skills; listening, speaking, reading, writing, we must know many vocabularies so we can talk to other people fluently. Even though people are good at grammar, they must first master vocabulary. The existence of vocabulary as a primary unit of language can not be denied or ignored. Without the ability to express a variety of meanings through words, communication in English can not take place in any meaningful way, regardless of how perfect the student's grammar and pronunciation are.

There are four different types of vocabulary. They are verb, adverb, noun, and adjective. According to Mukhoiyaroh (2020:192) There are eight classes of words:

1. Noun

Noun is a word that can be used to refer to anything, such as a person, animal, object, place, situation, quality, or idea.

Examples :

Do your homework

Cici is listening to the music.

2. Adverb

Adverb is the word that can modify verb, adjective and sentences.

Example : Kamrol runs quickly.

3. Verb

Verb are words that describe an activity carried out.

Example: Persando drives the car to the office.

4. Adjective

An adjective is a word to describe or modify noun or Pronoun.

Example: Koboy is the smart dog.

The Types of Nouns:

1. Common Noun

Words that refer to undefined or generic people, places, or things are referred to common nouns. For example, Country is a common noun that refers to a generic location, whereas Indonesia is not a common noun because it refers to a specific location. Common nouns are capitalized only when they start sentences or appear in names or titles, such as Grand Canyon or Iron Man.

The other examples are : School, car, planet, mountain, laptop,etc.

2. Proper Noun

A proper noun is used to identify a specific person, place, or thing. These terms must be capitalized. Proper nouns are always used in the name and title of things, such as the brand name Starbucks and the personal name Brown.

Examples: Indonesia, September, Monday, President, Cici

3. Singular Noun

Singular nouns are noun that refer to just one person, place, or thing.

Examples: book, fan, table, apple, door.

4. Plural Noun

Plural noun refers to noun that is more than one. To make it plural form, we need to add “s or es” after the noun.

Examples: windows, towels, potatoes, pens.

Not all nouns to make it plural adding by s or es but has different form, such as; foot – feet , mouse – mice, tooth – teeth, man – men, child – children, woman – women, person – people.

5. Concrete noun

Concrete noun is the noun that can be perceived through five senses. It can be seen, hear, taste, touch or smell.

Example: television, shoes, bag, wall, plate, spoon.

6. Abstract noun

Abstract noun is the inverse of concrete noun. It can't be perceived through five senses. We can't see it but we can feel it.

Example: belief, love, wind, air, truth.

7. Collective noun

Collective noun is the word for single things but referring to a group of people or things.

Examples: a nest of mice, a cloud of dust, a comb of bananas.

8. Countable noun

Countable noun is noun that can be counted. The form is plural or more than one.

Examples: many tables, some bags.

9. Uncountable noun

Uncountable noun is noun that can't be counted.

Example : salt, sugar, oil, star, hair.

Vocabulary learning is an essential component of language teaching. In other words, learning vocabulary is the most important and fundamental skill for people learning English as a foreign language as well as a second language. Hidayat and Yulianti (2020:152) say that learning vocabulary is an important aspect of second and foreign language acquisition and academic achievement, and it is critical to reading comprehension and proficiency. By knowing many vocabularies in English, it can make people easier to communicate.

Learning vocabulary in the context of computer learning and mobile assisted language learning refers to the technological possibilities for learning or consolidating English vocabulary. Vocabulary learning is the most common mobile assisted language learning activity reported in the literature. To better understanding how vocabulary learning occurs in a mobile learning environment, Abdulzahra (2020:416) says that vocabulary learning research is linked with

vocabulary apps. The use of mobile phones for learning vocabulary items has grown rapidly and steadily over the last decade.

On the other hand, knowing how to teach vocabulary is essential. The following are some vocabulary teaching techniques according to Rizky Setiawan and Wiedarti (2020:85)

1. Translation

Translation is a simple and fast way for teachers to achieve the goal of English language learning. When students want to switch from their native language to the target language, it can be difficult to translate some words because there is no structural equivalent in the two languages.

2. Giving examples

the sentences in this technique should have clear meanings so that they can be used to teach the meaning of the new vocabulary.

3. Realia

Using this technique, teachers can teach new vocabulary items using a real object in a classroom activity. This technique is considered to give students an advantage in understanding the words.

4. Pictures and mime

Teachers can use both pictures and mimes to teach new words' meanings. Pictures could be photos, wall art, flashcards, or anything else. When teachers want to teach students vocabulary items like home, room, fruit, or markets, it is highly recommended that they use pictures because they are difficult to explain. Furthermore, mime is regarded as a useful medium for

explaining action verbs such as swimming, sitting, walking, and so on.

These ideas are not difficult to grasp.

Andriani and Sriwahyuningsih (2019:171) mention the following factors that cause some words are difficult: pronunciation, spelling, grammar and meaning.

1. Pronunciation

Pronunciation is one of the factors that has a significant impact on vocabulary. Pronunciation refers to how a person pronounces a word. Students must listen to a new word in a foreign language in order to notice the sound at the beginning and end of the word, as well as the stress patterns.

2. Spelling

Students must understand the letters and syllables that constitute a word, which is known as spelling. Spelling is the act of correctly forming words from individual letters or the way a word is spelt.

3. Grammar

The grammar associated with the word is problematic, especially if it differs from the mother language equivalent. It can be difficult to remember whether a verb like, love, or hope is followed by an infinite (to swim) or a -ing form (swimming).

4. Meaning

When the meanings of two words overlap, students are likely to mix them up. For the examples, Make and do.

5. range, condition, and idiomatic expressions

According to Umasugi (2018:2) most students learn vocabulary passively due to a variety of factors. First, they find the teacher's explanations of meaning pronunciation, spelling, and grammatical functions are monotonous. Second, students only consider vocabulary learning to know the basic meaning of new words. Third, students typically acquire new vocabulary by reading new words in their textbooks. Fourth, many students do not want to apply what they have learnt. The level of people's vocabulary determines the quality of their language skill.

2.2.1 Vocabulary Mastery

Vocabulary mastery is important in learning vocabulary. A person's ability to recognize, understand, and use a word correctly through listening, speaking, reading, and writing is referred to vocabulary mastery. When learning vocabulary, students must understand the meaning of the words they use. It is also necessary to understand how to use them in a sentence. Artawan (2019:50) says that vocabulary learning is learning to differentiate the progression of meaning words in a target. Mastery of vocabulary implies the ability to recognize words and associate their meaning with a specific combination of terms. Students of English as a foreign language learned English vocabulary by watching and listening to movies and songs, reading English dictionaries and texts, and participating in Internet-based English games.

Mastering vocabulary implies that students have a thorough understanding of vocabularies, including their meanings, spoken and written forms, grammatical behavior, word derivation, collocations of words, register of the word spoken and written and word frequency. Asyiah (2017:295) states that receptive and

productive knowledge may be the only realistic way to measure depth of vocabulary knowledge when assessing students' vocabulary mastery. Receptive knowledge refers to words that learners recognize and understand when they occur in context, whereas productive knowledge refers to words that learners understand, can pronounce correctly, and use constructively in speaking and writing. Measuring students' receptive vocabulary is assumed to be more important because language is accepted receptively first. Based on the explanation above, it can be concluded that Vocabulary mastery is a person's knowledge or list of words in a language.

2.3 Scramble Game

Fita, Jatmiko, and Sudiby (2021:95) state that scramble is a column that contains questions and answers. The answers are written in the answer column, but they are written randomly. It can be concluded that scramble model is a learning model that provides questions and answers in the column. Scramble refers to games that train the development and improvement of vocabulary and thinking insight. The scramble word game is used to arrange jumbled words and letters, and students must form a meaningful word. The words are randomized so that students can design a solution.

There are numerous methods for learning. The scramble word game is one method for increasing students' learning and processing speed. Their method requires students to use both their right and left brains. In this method, students are not only asked questions but are also asked to quickly generate questions that are available in random conditions. Scramble is a learning method that helps students find and solve problems by sharing question and answer sheets. The

game scramble for students can improve their vocabulary knowledge. The scramble method can be used to practice arranging words, sentences, and paragraph for students to complete in order to good form.

2.3.1 Kinds of Scramble Game

According to Shoimin in Vebriani (2019:9) there are various types of scramble, including:

1. Scrambled Word

Scramble word is a game in which the letters are arranged to form a specific word with a meaning.

The examples:

P – i – l – p – u = pupil

B – a – t – l – e = table

g-k-n-o-l-w-e-d-e = knowledge

n – a – i – m – a – t – r – o – p = important

2. Scramble Sentences

Scramble sentence is a game in which you arrange random words to form a sentence. The sentence must be logical, meaningful, and relevant.

For example :

Did – they – what – do – holiday – on - last – week ? = What did they do on holiday last week ?

Learns – she – Mathematic – school – at = she learns methematic at school

Bestfriend – my – swim – swimming pool – and – I – in = I and my bestfriend swim in swimming pool

3. Discourse scramble

Discourse Scramble is a game in which you arrange a discourse using random sentences. The arrangement's results must be logical and meaningful

For example :

1. His name is Ciboy.
2. The name reminds me with my first dog.
3. Ciboy's fur is soft and fragrant.
4. The colour of his fur is yellow.
5. I have a dog.
6. He has beautiful eyes like western eye.
7. He always follows me to the farm every day.

From the example above, it can be seen it's scramble discourse but the sentence is not arranged. So the students have to arrange into good paragraph. It should be logical and meaningful.

I have a dog. His name is Ciboy. The name reminds me with my first dog. The colour of his fur is yellow. Ciboy's fur is soft and fragrant. He has beautiful eyes like western eye. He always follows me to the farm every day.

2.3.2 Procedures in Using Scramble Game

Methods for using the scramble game according to Ginariska in Vebriani (2019:8) the scramble method randomly groups students into high, medium, and low ability groups. The scramble method steps are as follows:

- a. The teacher enters the classroom to begin checking the attendance list.
- b. The teacher introduces the material and the learning goal.
- c. The teacher instructs the students to form groups of 2-3 students or more (it depends on situation in the classroom).

- d. Each group of students attempts to arrange scrambled words, sentences, or discourse.
- e. After the teacher has guided the students in discussing and presenting their material, the other group is given time to respond.
- f. The teacher instructs the students to write their answers in a specific time after they have completed the task.
- g. Finally, the teacher corrects the students' pronunciation errors.

2.3.3 Advantages and Disadvantages of Scramble Method

Advantages and disadvantages of scramble method, namely;

a) Advantages

1. Each group member is fully responsible for everything that happens in the group.
2. Students will be able to learn while playing with this method. They learn something that does not cause stress or depression.
3. This method can enforce group solidarity.
4. The materials provided by one of the game's methods are usually difficult to forget.
5. The competitive nature of this method may encourage
6. students compete in order to get ahead.

b) Disadvantages

1. When implementing this method, it can take a long time, making it difficult for the teacher to adapt to the time limitations.
2. Learning method is challenging to implement
3. Using this method usually causes noise.

2.4 Gamification

Razali (2020:2) states that games are created by mechanics, whereas gamification is created by elements. Gamification used game-based mechanics, aesthetics, and thinking to engage humans, motivate action, encourage learning, and solve problems. The goal is to teach students how to create an intellectual challenge, identifiable methods, and interactivity as a result of playing. Gamification relies on four components to achieve effective learning outcomes, the game, the element, the design, and the non-game context. Gamification is created using a strategy based on the gamification elements of mechanics, dynamics, and motives. As a result, gamification mechanics are recognized and provide a practical solution in a way that appeals to a specific group.

The elements distinguish each of the gamifications. Handoko et al (2021:1) state that there are several types of mechanics in the gamification element, such as searching, level of difficulty, badge, points, leaderboard, reward, story, avatar, and progress bar, which can be used separately or in combination. Gamification's main concept is to capitalize on the potential motivation in games by transferring the game design element to a non-gaming environment. It provides an opportunity to develop a new framework of understanding of their activities structure by experiencing the rules, roles, and emotions. Gamification has the potential to motivate students to participate and learn at class spiritly.

2.4.1 Concept of Game

Students must improve their vocabulary mastery, one of the strategy for improving student vocabulary is to play games. Game enables teachers to optimize each student's learning potential, games allow students to use their

language a less formal setting. The game is an excellent tool for teaching vocabulary. Using games in the classroom can be an effective strategy for teaching vocabulary. A game can increase learners' enthusiasm for learning vocabulary. Game-based learning can turn learners into the center of the learning process, making it easier, more interesting, and more effective.

For many learners, gaming is an important form of extramural exposure, and it would be beneficial to better understand what types of games are most beneficial. Jensen in Schmitt (2019:268) illustrates how finer-grained analyses can be beneficial. She classified the games as follows: games both with oral and written English input, games with only oral English input, games with only written English input. Further finer grained game research could investigate whether various kinds of games promote different types of vocabulary.

Web 2.0 tools like Kahoot, Quizlet, Edupuzzle, and Quizizz are some of the more popular educational program.

a. Kahoot

Lestari (2019:14) states that kahoot is a popular e-learning tool that can be easily used to provide metacognitive support, liveliness in class, and student attendance in higher education where teacher and student education are limited. With over 30 million users worldwide, the free online learning platform is based on behavioral design methodologies and is currently user centered. Kahoot is an example of educational software that employs game-based pedagogy and allows for the creation of online questionnaires, discussions, or exams, as well as the collaboration of students on research topics. Kahoot is a classroom learning game in which students participate. It

can be defined as the student's response system. Using the Kahoot application, multiple choice questions can be formulated in debate format and played with all students. Students in the Kahoot application press a button for the correct answer to a question prepared ahead of time and projected on the board using an internet enabled device.

b. Quizlet

Platzer (2020:422) states that Quizlet is a popular web vocabulary learning tool with seven self-study modes, Match, Learn, Test, Write, Spell, Gravity, and Flashcard. Quizlet as simple vocabulary learning tool can be accessed via web or a mobile app. User both teachers and students can upload wordlists containing L2 lexemes and their L1 translations, and Quizlet generates seven different self-study activities or self-tests based on these wordlists. There are eight activities Quizlet live. However, because this activity must be initiated through a teacher account, it is not available for self-study which is thought to be useful in establishing meaning-form relationships.

c. Edupuzzle

There are learning trends that are growing rapidly in this digital era. One of the trend is that learning can take place at anytime and from any location. EdPuzzle is a platform that enables teachers and students to engage in interactive video learning. One of EdPuzzle's strengths is that it allows students to learn through video at their own pace and ability. The teacher can collect data about student interactions with the video using EdPuzzle, such as the number of times students watch, answer questions, or provide responses.

The video can be edited directly with the video clipping feature to take only the needed portion. Furthermore, the teacher can insert their voice into the video and insert questions between the videos that students will watch to test their comprehension of the video. This is what makes video-based learning more interactive. As a result, EdPuzzle can be used as an alternative learning method in digital era. (Giyanto, Heliawaty, and Rubini 2020:2)

2.4.2 Quiziz Application

Quizizz is an educational application that uses the principle of gamification. It has some interesting features like avatars, music, a leaderboard, and a theme that makes students learn something while playing a game. Quizizz application can provide students with an experiential and enjoyable experience while doing exercises, particularly answering questions. After the students respond to the question, Quizizz automatically displays the memes to indicate whether their response is correct or not. (Dian Fadhilawati 2021:86)

Rahayu and Purnawarman (2019:103) say that the Quizizz application is an educational game-based program that combines activities and games into classrooms and helps students with a fun learning experience. In this case, the students can complete the exercises from the materials that they have studied on their computer, smartphone, or other electronic devices, and they can have a fair competition in doing the quiz with their friends because Quizizz includes a leaderboard to show the students' lively rank. The teacher can monitor the process and download the summary in the end of the test to assess the students' progress. From the explanation, we can conclude that Quizizz is an education program with incredible features such as memes, music, avatars, and themes to increase

students' motivation and participation in learning as well as quizzes. The teacher can see the students' quiz result in report and download it as a guideline to give feedback to the students

Many educators have been implemented Quizizz in the classroom. As an example, Quizizz can be used to arrange class activities and organize assessments. Quizizz application is an efficient way to improve students' skill acquisition and decreasing anxiety in their learning. Quizizz is an online game - based tool that allows students to assess their insight and advance in learning. The question order in Quizizz is randomized for each student. Teachers can assign homework with Quizizz to give students extra practice. So every question should have multiple-choice answers with two or four options. Quizizz is a free, user-friendly online formative assessment tool that assists teachers in assessing students' language skills as well as curriculum knowledge.

2.4.3 Features of Quizizz

Quizizz's main features that played an important role in this study were timely feedback, review section, repeat the test, and take a new quiz. These are the five mechanics focused on the Quizizz application: points, difficulty level, reward, and avatar. Quizizz feedback includes a game summary (score and rank), as well as performance statistics like the number of correct and incorrect answers, the number of unattempt questions, average time per question, and the longest streak. Following that is the review section, in which students can go over each question and learn the correct answers. After reviewing, students can retake the test with the same but randomized questions to activate their understanding. This feature allows learners to succeed through numerous attempts, resulting in active

learning that otherwise be unachievable by students doing 'the best' they can with one shot.

Pham 2022:279–280) state that users can create eight different types of questions, including multiple-choice, poll, fill-in-the-blank, open-ended, draw, audio response, video response, and reorder questions. Users or instructors can start a live quiz with an instructor-led session or assign homework with an asynchronous learning mode. While participants are answering questions in the live quiz mode, there is a live dashboard to see what is going on in the game. Instructors can view the results of the participants to determine which answers are correct and which are incorrect. Quizizz has emerged and been used in a variety of language classrooms to assist instructors or teachers in conducting a successful and motivating lesson.

2.4.4 Advantages and Disadvantages of Quiz Application

a. Advantages

There are many advantages by using quiz application, such as:

1. It's convenience and efficiency. Many of students are excited when they win Quizizz games since Quizizz help them boost their competitiveness and engagement in game sessions.
2. It doesn't need many papers because it's based on online tools.
3. Quizizz can give the motivation to the students because students must do the game based on the time that has been setting by the teacher.

b. Disadvantages

1. The application needs time to process or loading.

2. To get all the features, the user needs to purchase the application or share the referral code to get supper account.

2.5 Previous Study

In relation to this study, the writer chooses some previous research conducted by other researchers that is relevant to language learning, particularly vocabulary mastery, and used those previous studies as references:

The first research conducted by Lubis and Rambe (2021) "*The Effect of Scramble Model on Student's Vocabulary Mastery at the eleventh grade students of MA Swasta Al-Abraar Siondop Julu Angkola Selatan.*" The goal of this study is to learn about 1) the use of the scramble model in vocabulary mastery. 2) the students' mastery of vocabulary before and after using the scramble model 3) Using a pre-experimental design, determine whether the scramble model has a significant effect on vocabulary mastery at MA Swasta Al-Abraar Siondop Julu Angkola Selatan eleventh grade students (one-group pretest and posttest design). The sample consist of 22 students and they were taken by using purposive sampling technique. The researcher used a questionnaire and a test to collect data. SPSS 22 was used to analyze data on students' vocabulary mastery using the paired sample ttest and N- gain. The significant value of the pair sample ttest was 0.000, which is less than 0.05 (0.000 0.05). Furthermore, the N- gain is 0.51. It means that the scramble model has a significant effect on students' vocabulary mastery in the medium category. The contribution of this study to my research is by knowing the use of scramble game before and after post test. It concludes that by implementing scramble game in learning can improve student's vocabulary mastery. The similarity to my research is the research design which used

experimental quantitative. The differences to my research are the object of the study, technique of collecting data and the method of teaching vocabulary.

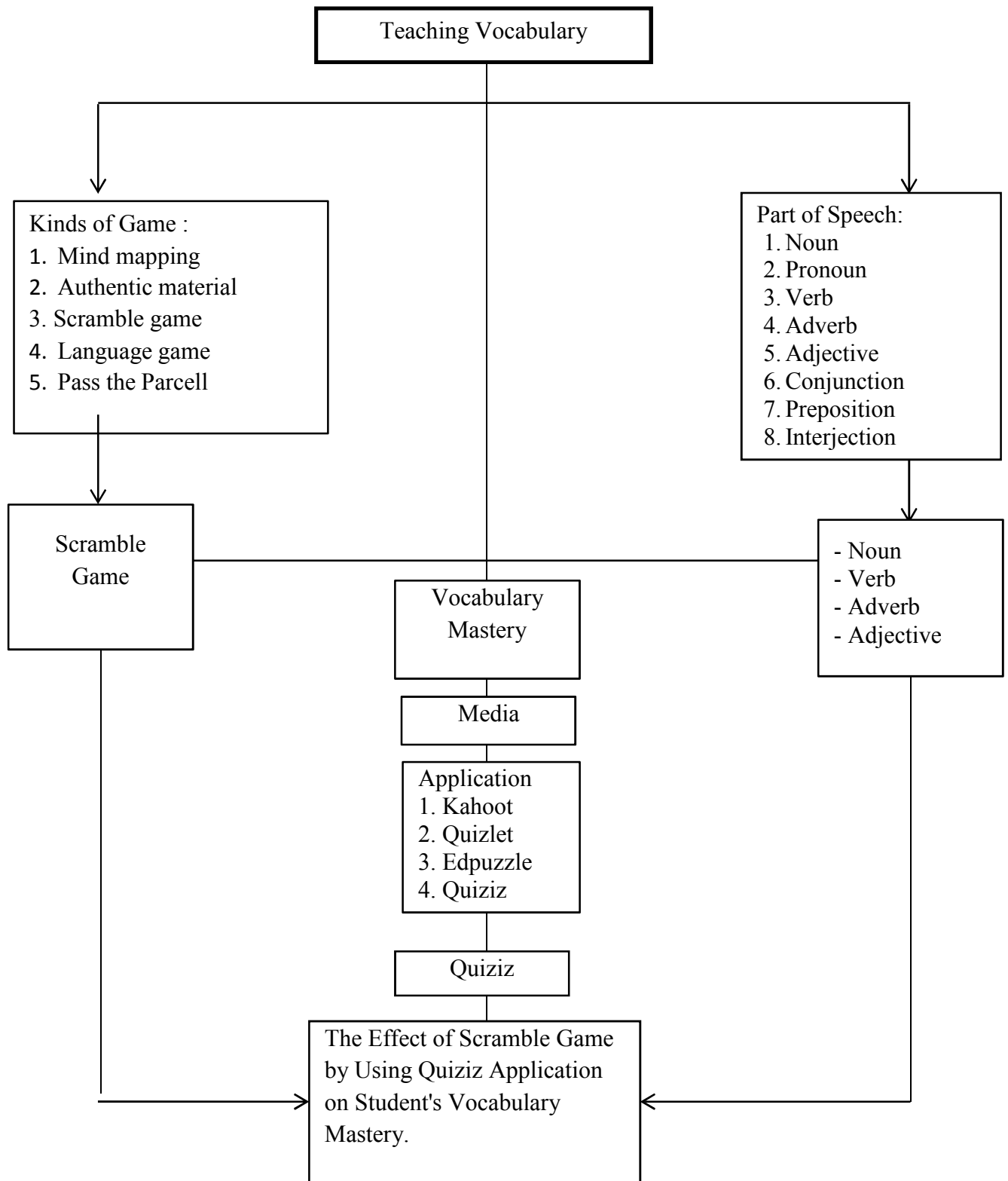
The second research was conducted by (Dita and Badrah Zaki (2022) "*The Effects of Scramble Game in Improving Students Vocabulary at Seventh Grade Students of Muhammadiyah Plus Batam.*" The research is about teaching vocabulary to seventh grade students at Muhammadiyah Plus Batam Junior High School. Students at this level are expected to be able to master the vocabulary specially enclosed in their English Cambridge student's book and workbook. Classroom Action Research (CAR) was used as the research methodology in this study. The researcher discovered that the students lack of vocabulary and motivation to learn new words. The researcher in this study uses a scramble game to improve their vocabulary knowledge. The purpose of this research is to examine The Effects of the Scramble Game on Improving Student's Vocabulary. The participants are students from grade 7B at Muhammadiyah Plus Batam Secondary School, the total is 28 students. The use of scramble game to improve student's vocabulary is effective. The contribution of this study is used as the reference to my research which by implementing scramble game in learning can improve student's vocabulary mastery. The similarity is using scramble game to improve student's vocabulary. The differences are the methodology of the study that uses Classroom Action Research (CAR), the population and sample of the study.

The third research was conducted by Sakinah (2022) "*The Use of Scramble Word Game on Student's Vocabulary.*" The purpose of this study is to look into the effects of scrambled word games on students' vocabulary mastery. This study's

population consists of first-grade students from SMP Negeri 3 Cikembar. The total number of samples is ten students from VII-B. A simple random sampling technique is used to select the sample. The writer employs a pre-experimental method and a one-group pretest-posttest design in this study. Students are given a pre-test, two treatments, and a post-test by the writer. A vocabulary test is given to students to assess their knowledge of descriptive text as the topic. According to the data calculation, the mean difference is 12.6 and the total deviation of difference is 764.4. The contribution of this study is the use of research design which uses experimental quantitative. The results show that using scrambled word games has effect on students' vocabulary mastery. The differences of this study to my research are the object, sample, and the technique of teaching scramble game that uses Quiziz application.

2.6 Conceptual Framework

Vocabulary influences all four skills of speaking English, listening, reading, speaking, and writing. As a result, mastering vocabulary is essential to students' ability to master a language. Teaching English vocabulary effectively can help students communicate and express their thoughts in their activities. Using the scramble game in the Quiziz application to study English as a foreign language is one of the most effective ways to help students improve their ability to learn new words.



Conceptual Framework of Students Vocabulary Mastery
(Cici Suzana Saragih, 2023)

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

Methodology is the method, system, rule, or procedure that a researcher must follow in order to complete the research activity. Research methodology is a scientific method of data collection with specific goals and applications. This study was conducted by using experimental quantitative design with pre test, treatment and post- test design. This research applied to know whether there was the effect of scramble game towards students' vocabulary mastery or not.

quantitative method is used to examine questions that can be best answered by collecting and statistically analyzing data that are in numerical form. (Lube and Nuraeni 2020:110). Experiment is a scientific investigation in which the researcher manipulates one or more independent variables while controlling any other relevant variables and observing the effect of the manipulations on the dependent variable. The sample divided into two groups by using experimental research, the experimental group and the control group. Experimental group was treated by using scramble game and in control group was taught by conventional strategy. The students were taught using scramble game. Both groups received the same pre-test and post-test items.

Table 3.1 Research Design

Group	Test	Teaching	Test
Experimental	Pre – test	Using scramble game	Post – test
Control	Post – test	Using conventional strategy	Post – test

3.2 Population and Sample

3.2.1 Population

According to Sugiono in Ida (2019:27) population is a geographic generalization with the following characteristics, the object/subject has quality and certain characteristics that are set by the researcher to learn and then make the conclusion. The population of this research were the nine grade students of SMP Gajah Mada Medan in academic year 2022/2023. It consisted of 40 students.

3.2.2 Sample

Sampling is a method of taking samples. Sampling is established to select some of the individual processes in research as a voluntary. The goal of sampling is to use some individuals to gather information about the population. The sample of this research used random sampling technique. This sample were 40 students which was divided into 2 groups. They were 20 students as Experimental group and 20 as Control group.

3.3 The Instrument of Collecting Data

According to Desi (2018:28) an instrument is a collection of tools used by a researcher to collect data during the research process. Instruments included tests, surveys, interviews, observations, rating scales, and documentation. instruments are tools used to measure natural or social phenomena. Data collection from the research subject can be accomplished using a variety of techniques, locations, and resources, one of them is a test. The Instruments to collect data in this study was vocabulary test. It used two types of test, such as arrange the words, drag and drop vocabulary. The researcher gave 20 questions as the pre – test and post – test by using media, Quiziz application.

3.4 The Tehnique of Collecting Data

In collecting the data, the researcher must have method to collect data which is appropriate with the need of research. "Designing an instrument is essentially designing an assessment tool because it evaluates the collection of data on the subject of investigation," (Che Md Ghazali 2016: 150). The writer collected data by selecting SMP Gajah Mada students in third grade. In this study there were several procedures that used by the researcher in collecting data, such as;

1. The researcher asked the students to bring their phone.
2. The students opened Quiziz application.
3. The researcher gave the code to access the quiz.
4. In application, students found the questions and they could directly answer.
5. The researcher gave reorder the words, drag and drop vocabulary to the third-grade students of SMP Gajah Mada with two classes, first group as experimental group and the second group as the control group.
6. The data was taken from the results of the test in Quiziz application

The tehniques of collecting data can be done as follow:

1. Test

The researcher tested the students' vocabulary skills and abilities. This study employed two tests: a pre-test and a post-test.

a. pre-test

In the pre-test, the writer gave a pre-test before gave treatment. This test was used to determine the basic of students' vocabulary.

Pre – test was given before the treatment. The test was following by 40 students in 45 minutes time allocation.

b. Treatment

After the students had done the pre – test, they were given treatment by applying scramble game by using Quiziz application in students' learning.

c. Post – test

After giving the treatment, the researcher administered a post-test. A post-test was used to determine the progress of the students. The purpose of this test was to determine whether scramble game can improve students' vocabulary.

Table 3.4 Treatment for Experimental and Control Group

No	Step	Experimental Group	Control Group	Time
1	Pre – Test	<ol style="list-style-type: none"> 1. Teacher greeted and checked the student's attendance. 2. Teacher gave motivation & instruction to the students. 3. Teacher gave pre – test. 	<ol style="list-style-type: none"> 1. Teacher greeted and checked the student's attendance. 2. Teacher gave motivation & instruction to the students. 3. Teacher gave pre – test. 	45 minutes
2	Treatment	<ol style="list-style-type: none"> 1. Teacher greeted and checked the student's attendance. 2. Teacher gave motivation to the students. 3. Teacher taught vocabulary about Noun, verb, adverb, and adjective. 4. Teacher taught about vocabulary by using scramble game in Quiziz application. 5. Teacher divided students 2-3 per group. 6. The students made circle in classroom. 7. The students played the game 	<ol style="list-style-type: none"> 1. Teacher greeted and checked the student's attendance. 2. Teacher gave motivation to the students. 3. Teacher taught vocabulary about Noun, verb, adverb, and adjective. 4. Teacher used conventional method by using marker and whiteboard. 5. Teacher asked the students to memorize vocabulary that they have learnt. 	4× meetings
		<ol style="list-style-type: none"> 1. Teacher gave post – test to the students. 	<ol style="list-style-type: none"> 1. Teacher gave post – test to the students 	

3	Post Test	–	2. Teacher asked the students if they have questions. 3. Teacher said good bye to the students	2. Teacher asked the students if they have questions 3. Teacher said good bye to the students	45 minutes
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2. Observation

The researcher observed students' behavior and activity during the lesson process to determine how the learning process was carried out. During the observation, the researcher creates an observation sheet with a list of the activities of the students.

3. Documentation

The researcher used a document contains data from the school, such as the total number of students, teachers, and the condition of the school.

3.5 The Tehnique of Analyzing Data

The data obtained was the result of a vocabulary test administered to students as a pre- and post-test. The pre-test was given to the students to assess their vocabulary knowledge. Following that, scrambled word games were used as a treatment in teaching learning activities. The post-test were given to them at the end of the study. The test had the same difficulty level as the pre-test. To determine the effect of the treatment, the pre-test and post-test scores were analyzed using the t-test formula.

The data analysis process involved gathering raw data and transforming it into useful information that users can use to make decisions. The data was used to explain the situation in the classroom during the teaching-learning process.

The data was collected and analyzed to answer the question, and the following procedures were used to analyze the research data:

The data was analyzed by using steps stated by Arikunto in Faiz and Siahaan (2022:12)

1. Scoring the student's answer for the correct and wrong answer
2. Getting the main score of each group
3. Comparing the mean score of the two groups
4. Finding out which one is higher
5. Explaining the meaning of differences of the means score
6. Checking the significances by using t-test
7. Explaining the implication of the findings to the teaching of scramble Game.

In analyzing the data between experimental group and control group, the researcher used T – test formula as follows:

$$t = \frac{Mx - My}{\sqrt{\left\{ \frac{\sum x^2 + \sum y^2}{Nx + Ny - 2} \right\} \left(\frac{1}{Nx} + \frac{1}{Ny} \right)}}$$

Notes:

Mx: The mean of experimental group

My: The mean of control group

Nx: Number of sample of experimental group

Ny: Number of sample of control group

$\sum x$: The sum of the score of the experimental class

\sum : The sum of the score of the control class

3.6 The Scoring of the Test

In scoring the test, the researcher used the score ranging from 0 – 100 by seeing the score from the quiziz application reports. There were the accuracy, correct number, points, so the researcher saw the score of the students from accuracy. It means the researcher didn't need to count the score again, but could be seen directly. It was scored by the system of Quiziz application.

P = points

C = The correct answer

N = The number of items

A = Accuracy

3.7 Hypothesis Testing

Hypothesis testing conducted to see whether scramble game by using Quiziz application had a significant effect on vocabulary mastery in the second grade of Junior High School Gajah Mada Medan. The hypothesis was tested by using a pair sample T-test to determine whether the hypothesis was rejected or accepted. H_0 was rejected if t -table was greater than t -count. Meanwhile, H_0 was accepted if t -table was less than t -count.

3.8 Validity and Reliability Testing

3.8.1 Validity

Validity is defined as the ability to measure what is intended to be measured. To measure the validity of the test, the researcher gave the test to the students . After that the student's scores would be concluded the result of the test was valid in testing student's vocabulary mastery. According to Che Md Ghazali

(2016:149) a test is said to have construct validity when it measures specific goals with the subject matter or content that has already been provided. It means that the test would be valid to the extent that was measured what it supposed to measure. There were four types of validity such as, construct validity, concurrent validity, content validity and face validity. This research conducted construct validity. Construct validity was about how well a test measures the concept that designed to evaluate.

Table 3.8.1 Construct Validity

No	Part of speech	Test Item	Kinds of Test	Score
1	Noun	5	Drag and drop	25
2	Verb	5	Arrange the words	25
3	Adverb	5	Drag and drop	25
4	Adjective	5	Arrange the words	25
Total		20		100

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$$

Where:

r_{xy} = the correlation between two variabels

N = total of the data

$\sum X$ = the mark in the pre-test

$\sum Y$ = the mark in the post-test

$\sum X^2$ = the sum of the squares of X scores

$\sum Y^2$ = the sum of the squares of Y scores

3.8.2 Reliability

One of the characteristics of good tests is reliability. The result is the same even if it is exercised many times. According to Taherdoost (2018:33) Reliability as the degree to which a measurement of a phenomenon produces stable and consistent results is referred to as its reliability. Repeatability is another aspect of reliability. A scale or test was said to be reliable if repeated measurements taken under constant conditions yield the same. Testing for reliability was important because it referred to the consistency of a measuring instrument's parts.

In order to find out whether the test was reliable or not, the researcher used the formula of Brown in Ida (2019: 31) as followed:

$$r = \left(\frac{1}{K-1} \right) \left(\frac{1-M(K-M)}{K.Vt} \right)$$

Where:

R = The reliability of the test

K = The total number of questions

SM = The average of the score

Vt = The standard deviation of the test score.

To get the reliability of the test, standard deviation should be counted. The value of correlation as followed :

Score	Level
0.81 – 1.0	Very high
0.61 – 0.8	High
0.41 – 0.6	Fair
0.21 – 0.4	Low
0.0 – 0.2	Very low

