TEACHING ENGLISH VOCABULARY BY USING MIND MAP TECHNIQUE IN TEACHING THE EIGHT YEAR OF MTs DATOK SULAIMAN PALOPO

A THESIS
Submitted to the English Language Studies Program of S1 Tarbiyah Department of State College for Islamic Studies of Palopo in Partial Fulfillment of Requirement for S.Pd.Degree in English Education

By,
MUH. ASWADI
NIM 08.16.3.0068

ENGLISH STUDY PROGRAM OF TARBIYAH DEPARTEMENT OF THE STATE COLLEGE FOR ISLAMIC STUDIES (STAIN) PALOPO
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2013
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ABSTRACT


Key Words : Teaching, English Vocabulary, Mind Map Technique

This thesis studies about teaching English vocabulary by Using Mind Map Technique to the Eighth Year Students of MTs Satu Atap Datok Sulaiman Palopo. The aim of the research is to find out whether the use of Mind Map Technique in teaching vocabulary can improve the students’ vocabulary.

The researcher used experimental method, and the design was one group of pre-test, post-test design. The population was the second year students of MTs Satu Atap Datok Sulaiman Palopo 2012/2013 Academic Year, it consists of 23 students. It was taken by census sampling technique. The instrument for the research was test. This research consisted of two variables; dependent variable is the students’ English vocabulary to the eighth year students of MTs SA Datok Sulaiman Palopo, and independent variable is the Mind Map Technique.

The result of the research hypothesis is acceptable because t-test is bigger than t-table, the t-count = 13.011 ≥ 2.831 with df 12. The research showed that there is significance improvement of the students’ English vocabulary by using mind map technique.
CHAPTER I
INTRODUCTION

A. Background

In this modern area, people demand to have more than one language. Language as a tool communication takes an important role in our daily activities. Without communication, we will be left behind. Communication in foreign language is a bridge to get information, knowledge, and culture. Indonesia as a developing country has realized that English as an International language is needed to be mastered by Indonesian people.

English is the most common language used in commerce, business, technology and education. It is spoken and learnt by people as means of communication for different purposes.

English has an important position in education in our country and now became a subject since the Elementary School to University level. An education process is not only done in one place, but also can be done in houses, in society and schools.\(^1\)

English is essential to be taught for the younger people. For this case; students from the beginner up the Senior High School. In developing the students’ ability in

mastering English, it cannot be separated from vocabulary mastery. Because it can be a measurement of students, understand in English. Teaching vocabulary can be done through some ways or some techniques.

Actually there are many problems in learning English, one of which is how to create interesting conditions in the class while studying English, especially in learning vocabulary. Vocabulary items are essential to improve the four language skills of the students; they are listening, speaking, writing and reading. It is hard to master the four language skills without mastering or understanding a number of words, because it is fundamental in language learning. Vocabulary mastery in language learning is a basic need to reach a good achievement of the target language. A large vocabulary helps students to express their idea spontaneously. So, it is important to find an exact way of situation to make students interested in improving their vocabularies.

MTs Satu Atap Datok Sulaiman Palopo is a formal educational institution that is hoped can produce students who have capability especially in English. In fact, the students of MTs Satu Atap Datok Sulaiman Palopo have low ability in mastering vocabulary and they need to learn vocabulary through interesting method, because a good method or technique can make the students feel comfortable and motivated in learning.

The mind map technique is one of technique which can make students are easy to understand the material because by using this technique the teacher gives the students more opportunity to express their idea.
Mind mapping is a beneficial learning tool to help students brainstorm any topic and think creatively. Mind maps are particularly helpful in the writing process and provide students with a natural way of thinking and building thoughts on a story plot or theme.²

Mind maps also provide teachers with insight into their students’ thought process regarding a specific topic. By asking students to create mind maps demonstrating their comprehension of a concept, teachers are able to understand what a student’s prior knowledge was and how well the student understands the assignment or the material being taught. This is a very effective way of evaluating students’ understanding.³

Based on explanation above, the researcher is interested in doing a research under the title “Teaching English Vocabulary by Using Mind Map Technique to the Eighth Year of MTs SA Datok Sulaiman Palopo”.

B. Problem Statement

Based on the background, the researcher formulated the following research question that: “Is there any improvement of students’ English vocabulary through the use of mind map technique to the Eighth Year of MTs SA Datok Sulaiman Palopo”?  


³ Ibid.
C. Objective of the Research

Relevant to the research question above, the researcher states specific objectives to find out whether the use of mind map technique in teaching vocabulary can improve the students’ vocabulary.

D. Significance of the Research

The result of this study is expected to be any use theoretically and practically:

1. Theoretically

   The use of mind map technique is expected to give contribution to the English learners in general and specially for the students of MTs SA Datok Sulaiman Palopo in mastery English vocabulary.

2. Practically

   The result of the study is expected to give information for the English teachers especially to the English teacher of MTs SA Datok Sulaiman Palopo. It is to improve the students’ English vocabulary through the use of mind map technique in teaching and learning process.

E. Definition of Terms

To get general understanding about the aim of the title this research, the researcher gives definition as follows:
1. Vocabulary is all the word that a person knows or uses all the words in a language, list of words with their meaning, especially in a book for learning foreign language.\(^4\)

2. Mind mapping technique are means of organizing information visually, showing how big ideas are made of big pieces, which in turn are composed of smaller pieces.\(^5\)

3. Technique is a method of doing that needs skill in art, music, etc.\(^6\)

**F. Scope of the Research**

The scope of the research is the researcher implementing mind mapping technique in teaching vocabulary for the eighth year of MTs Satu Atap Datok Sulaiman Palopo. Vocabulary use here is the most common noun, such as people, things, places, animals, and parts of the body.

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\(^5\) http://thoughtwrestling.com/blog/mind-mapping-techniques-buzan/, accessed on May, 8\(^{th}\) 2013.

\(^6\) Ibid, p. 425.
CHAPTER II

REVIEW OF THE RELATED LITERATURE

A. Previous Studies

In this chapter, the researcher took some previous studies about teaching English at Junior High School and Senior High School. They are conducted by Sadariyahwati (2012), Indah (2010) and Yusuf Effendi (2009).

Sadariyahwati (2012) in her research under the topic “Teaching Vocabulary through Audio Lingual Method to the Seventh Year Students of MTs SA Datok Sulaiman Palopo”. The population took from the students of the Seventh Year, and she only takes 13 students in 2011/2012 Academic Year. Sadariyahwati finding in her thesis found that the vocabulary at the second grade students of MTs SA Datok Sulaiman Palopo improve after being given some treatments to mastery vocabulary through Audio Lingual Method1

Indah (2010) in her research under the topic “Teaching Vocabulary through Mind Mapping Technique to the Tenth Grade Students of SMA Negeri 15 Palembang”. For the population of this study, the writer chose the tenth grade students of SMA Negeri 15 Palembang in the academic year of 2009-2010. In this case, there are nine classes. The total number of population was 360 students. In this

study, there would be two classes chosen through the cluster random sampling. One would be treated as the experimental group and the other as the control group. After getting the two classes, the writer did the individual random sampling by giving a pretest to the students from the two classes as pretested and then matched based on their similar scores. Based on these findings, it would be said that the $H_0$ was rejected and the $H_a$ was accepted. It means it was effective to teach vocabulary through mind mapping technique. \(^2\)

The third thesis is entitled “The Effectiveness of Mind Mapping Technique in Increasing the Second Year Students’ Reading Comprehension at SLTP Negeri 4 Palembang” which is written by Yusuf Effendi (2009), a student of University of PGRI. The result of the calculation of the matched t-test formula was 4.19. It indicated that the $t$-obtained was higher than the critical value (02.021). The findings of the the study showed that mind mapping could be significantly effective in teaching reading comprehension to the subject of SLTP Negeri 43 Palembang.\(^3\)

There are some differences between those previous theses and the writer’s study, they are; (1) in Sadariyahwati’s thesis, she took teaching vocabulary through Audio Lingual Method and she used pre-experimental method. Her study was done in Mts SA Datok Sulaiman Palopo to the first year students. (2) in Yusuf’s thesis, he


\(^3\)Ibid.
took reading comprehension and he used quasi-experimental method. His study was done in SLTP Negeri 43 Palembang to the second year students.

The similarity of the previous study with this study is the same independent variables, mind mapping in Buzan’s Principles.

Based on the research and experience above, the telling about improving students’ vocabulary, it’s mean that how to make the students memorize the vocabulary although with the different way or technique. So, the researcher interest to research about the mind map technique to improve their vocabulary.

B. Theory of Teaching

According to Jack C. Richards explain clearly: teaching is showing or helping someone to learn how to do something, giving information, guiding in the study of something, providing with knowledge, causing to know or understand.4 Whereas, Douglas explain clearly “teaching is guiding and facilitating learning, enabling the learner to learn, setting the condition for learning.5

Teaching as an art that delivered of science and skill to the students. Because of art the variation of method or teaching technique is depend on art skill in every

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teacher own, the quality of art skill can increase and develop. So the teaching targets the more effective and efficient.

C. Concept of Vocabulary

1. Definition of Vocabulary

Vocabulary is knowledge of word meanings. However, vocabulary is more complex than this definition suggests. Vocabulary knowledge is not something that can ever be fully mastered, it is something that expands and deepens over course of a lifetime. Instruction in vocabulary involves for more than looking up words in a dictionary and using the words in a sentence. In English dictionary, Jhon M. Echols and Hassan Shadily stated that vocabulary means that all of the words in the world which registered.⁶

According to Martin H. Manser in his dictionary Oxford Learner’s Pocket that: “vocabulary is total number of words in a language, words known to a person, the of three years old, list of words with their meanings, especially at the back of book for teaching a foreign language”.⁷

According to definition above can be concluded that vocabulary is a stock of word in language, written or spoken, with meaning that considered as cultural meanings used by group or individually community.

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⁷ Martin H. Manser, *op.cit*, p. 461.
2. Types of Vocabulary

Collier writes that there are two words lists, one of function words and one containing a basic 2,000 word English vocabulary, in addition, there is a list of suffixes and prefixes to be used with 2,000 word list.⁸

a. Function words and content words

Function words are those often have little meaning in the dictionary but which serve important functions in relating to other words in the language to each other. Examples are: is, at, to, which, for, by, he, etc. words are interesting in themselves. Our vocabulary is rich and colorful. Even small-scale dictionary thousands of words, covering every possible shade of meaning, many of these words comes to us from the far corners of the world. Of course component speaker of the language also know the lexis or vocabulary of language although that knowledge will very depending for example, on their education and occupation. They know what words mean and they know the substitutes of some of those meanings.⁹

Among the function words are articles, auxiliary verbs, conjunctions, prepositions, pronouns, noun determines, substitutes nouns, intensifies and other specialized expressions. They also in include days of the week and months of the year. Many of the words can be used in more than one way.

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⁸Collier Macmillan, the Key to English Vocabulary, (London: 971), p. vi.

⁹Ibid, Collier
1) Articles

Article is word that place in front of noun and it function as determines or divider noun in a sentence. This the traditional term for a, an, and the, the correct use of these little words is extremely important in English. There is a lot of different between “woman”, and “the woman”, for instance. Some should be included among the articles, since it is used before plural count nouns the way a/an is used before singulars: “a woman”, “some woman”.

A and an are used in front of singular count nouns. A and an have the same meaning. A is used in front of words that begin with consonants: b, c, d, f, g, h, k, l, m, n, p, etc. Examples:

- a book  a language
- a city   a cat

an is used in front of words that begin with a, e, i, and o.

Examples:

- an apple  an apartment
- an ear     an idea

---

10 Ghufron Maba, Practical *Guide to Mastering English Grammar*, (Surabaya: Terbit Terang, w.y.), p. 78.

Use *an* if a word that begins with “u” has vowel sound: e.g. an uncle, an ugly picture. Use *a* if a words that begins with “u” has a /uw/ sound: a university, a usual event.

Compare:

*I have an uncle*, and

*He works at a university.*

In some words that begin with “h” the “h” is not pronounced. Instead, the words begins with a vowel sound and *an* is used. e.g. *an hour, an honor*. In most words that begin with “h” that “h” is pronounced. Use *a* if the “h” is pronounced.

Compare:

*I need an hour to finish my homework*, and

*I live in a house. He lives in a hotel.*

2) Auxiliary Verbs

Auxiliary verbs are “helping” verbs that can combine with various parts other verbs to make verb phrases. The most common are *be, have, and do*. In addition, we have the modals: *can, could, may, might, must, shall, should, will, would*, as well as *dare* and *need* under certain conditions. The phrases *ought to, used to, and (be) supposed to* are included because they resemble modals, in spite of the fact that, unlike ordinary modals, they include the word *to*.

---


3) Conjunctions

Conjunction is a word that connects words, parts of sentences or connect sentence with sentence. In other word, word that is used to connect words, phrase or clause in a sentence. Conjunctions join various parts of the sentence together. They are of two kinds: coordinating and subordinating.

a) Coordinating Conjunction

Coordinating conjunction is the connect word that is used to connect two clauses that is the same degree or level. These join matching structures, that is, they join nouns to nouns, verbs to verbs, adjectives to adjectives, and so on. In the list, they are:

- and
- both … and
- yet
- not only … but also
- nor
- etc.

b) Subordinate Conjunction

Subordinate conjunction is the word that connect two the same degree or level sentences. Each of the two sentences as main clause and subordinate clause, these are the words that introduce adjectival and adverbial clauses. The conjunctions they

---


introduce certain subjects and verbs but cannot stand alone as independent sentences.

Here are the ones in the list:

- after
- although
- because
- when
- though
- as
- that
- till
- until
- even
- moreover
- etc.

The questions words *how, who, whom, what, which, when, why, and where* also introduce subordinate clauses of a special type, usually called indirect question. The relative pronouns *who, Whom, which, whose*, and *that* introduce subordinate clauses of another type, usually called relative clauses, which modify nouns.

4) Preposition

Preposition is word placed before noun or pronoun to indicate the relation among the parts of other sentences.\(^{18}\) They are always followed by nouns or noun constructions, and the whole phrase thus formed modifies some other word in sentences.\(^{19}\) The prepositions in our list of function words are these:

- about
- but
- outside
- Before
- behind
- below
- Beside
- between
- beyond

Remember that most of these words may also function as adverbs, if noun follows.

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5) Pronouns

Pronoun is a word that is used to change noun in a sentence. Its function in order there is no repeated word that monotone. A pronoun refers to a noun. It is used in place of a noun. E.g. Mary is married. She has two children. “She” is a pronoun. It refers to “Mary”. It is used place of noun. Mary is my friend. I know her well. “Her” is a pronoun. It refers to “Mary”. “She” is a subject pronoun; “her” is an object pronoun. A pronoun is used in the same ways as a noun: as a subject or as an object of a verb or preposition.

According to Herpinus Simanjuntak, there are nine kinds of pronouns, namely:

a) Personal Pronoun: I, you, he, she, we, they.

b) Demonstrative Pronoun: this, that, these, those.

c) Possessive Pronoun: my, mine, yours, his, hers, ours, theirs.

d) Interrogative Pronoun: who, which, what, whose, whom.

e) Indefinite Pronoun: someone, anyone, something.

f) Reflexive Pronoun: myself, yourself, itself, himself, ourselves, yourselves, themselves.

g) Emphasizing Pronoun.

h) Reciprocal Pronoun: one another, with one another, each other, to each other.

---


i) Relative Pronoun: who, whose, which, that.

6) Noun Determiners

These are the expressions that signal the presence or the possibility of the presence of a following noun. (if there is no noun following, then the expression itself functions as a noun – a “substitute noun”).

7) Substitute Nouns

These expressions resemble the pronouns in that they echo, or replace, a noun in a context, but for grammatical reasons it is convenient to separate them from the pronouns. Many of them can be noun determiners as well. These words in the list may be substitute nouns:

all  less  none
either  (a) few  most
much  several  etc.

8) Intensifier

These are traditionally called adverbs, but they behave in special ways and are better treated separately. Here are the ones on the list:

almost  awfully  enough
fairly  hardly  just

Content word name and describe the infinitive number of thing, person, event, and process that speaker of English want to talk about. Some of them (water, man, eat, drink, house). Content word can be divided into three general classes.

---

a) Word naming things, ideas, entities.

b) Word naming actions.

c) Word used to describe the qualities of those things or actions.\textsuperscript{23}

These divisions correspond closely to the traditional part of speech: noun, verb, adjective, and adverb.

a) Noun

Pora states that “noun is the word which can be the name of people, the name of place, and the name of things or idea”.\textsuperscript{24}

1) Kinds of noun:

- Common noun: dog, man, table, chicken, sailor.
- Proper noun: France, Mrs. John, Winda, Japan.
- Noun: beauty, charity, courage
- Collective noun: group, crowd, team, etc.

2) Form of noun:

- Concrete noun: Mary, table, gold, woman, Bandung, iron.
- Abstract noun: happiness, healthy, wealth, life, loneliness.

3) The function of noun:

(a) The subject of a verb: Linda arrived

(b) The complement of verb: Jeremy is a sailor

\textsuperscript{23} Ibid.

(c) The object of verb: I saw Mary

(d) The object of preposition: I spoke to Jeremy

(e) A noun can also be in the possessive case: Jeremy’s bag.

4) Gender

(a) Masculine: men, boys, father, grandfather.

(b) Feminine: women, girls, mother, grandmother.

5) Plurals

(a) The plural of a noun is usually made by adding S to the singular
   Door – doors
   Table – tables

(b) Noun ending in O, SH, SS, or X form Their plural by adding ES:
   Potato – potatoes
   Dish – dishes
   Glass – glasses
   Box - boxes

(c) Noun ending in following a consonant forms their plural by dropping the Y and adding IES.
   Baby – babies
   Fly - flies

(d) A few nouns form their plural by vowel change:
   Mouse – mice
   Man – men
(e) Certain words are always plural and take a plural verb:

Clothes  people
Shorts  socks

(f) A number of words ending in *ICS*:

Athletics
Acoustics

6) Noun compounds

Noun compounds consist of the following composite form:

(a) Noun + noun: boyfriend, birthday, classmate, doghouse.

(b) Possessive noun + noun: lady’s maid, artist’s model. Sometimes the S is omitted from the first noun: a women college, a Mandiri Bank.

(c) Adjective + noun: blackbird, gentleman, hotdog, grandfather.

(d) Verb + noun: hitman, playboy, playmate, sportwear.

(e) Noun + verb: daydream, headache, sunshine, waterfall.

(f) Gerund + noun: dining room, punching bag.

(g) Noun + gerund: fortune telling, water skilling.

(h) Preposition + noun: outsider, overhead, undertaker, underdog.

(i) Verb + preposition + adverb: breakdown, make up, grown up.\(^\text{25}\)

7) Foreign plurals:

A foreign plural is plurals form, form foreign language:

\[^{25}\text{Achmad Marzuq M, Pintar Kosakata Bahasa Inggris, (Surabaya: Penerbit Indah, 2004), p. 144.}\]
b. Verb

Verb is word which shows the activities and the chief word a sentence. And according to Hariyanto and Haryono in English grammar, verb can be divided into four kinds, they are:

1) Infinitive verb

Infinitive verb divided into two kinds, they are:

- Infinitive with to
- Infinitive without to

<table>
<thead>
<tr>
<th>Verb</th>
<th>Infinitive with to</th>
<th>Infinitive without to</th>
</tr>
</thead>
<tbody>
<tr>
<td>To start</td>
<td>buy</td>
<td></td>
</tr>
<tr>
<td>To propose</td>
<td>eat</td>
<td></td>
</tr>
<tr>
<td>To refuse</td>
<td>drink, etc</td>
<td></td>
</tr>
</tbody>
</table>

2) Regular and Irregular Verb

Regular verb is the change of verb which follows the normal form, by adding it *d* or *ed* to be past tense and past participle.

Examples:

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Past Tense</th>
<th>Past Participle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss</td>
<td>Discussed</td>
<td>Discussed</td>
</tr>
<tr>
<td>Pull</td>
<td>Pulled</td>
<td>Pulled</td>
</tr>
</tbody>
</table>

Irregular verb is the change of verb which does not follow the formal form, but it must be memorized.

---

Examples:

<table>
<thead>
<tr>
<th>Infinitive</th>
<th>Past tense</th>
<th>Past Participle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bear</td>
<td>Bore</td>
<td>Born</td>
</tr>
<tr>
<td>Go</td>
<td>Went</td>
<td>Gone</td>
</tr>
<tr>
<td>Grow</td>
<td>Grew</td>
<td>Grown</td>
</tr>
</tbody>
</table>

3) Transitive and Intransitive Verb

Transitive verb is the word which needs object to complete the meaning or it cannot stand alone without noun and pronoun as object.

Examples:

- He *will* come to my house
- They *give* me a ruler

Intransitive verb is the verb which does not need object because it has complete meaning and its verb always active verb.

Examples:

- Bark  Fall
- Go    Become
- Cry   etc.

4) Full verb, auxiliary verb and linking verb

Full verb is the verb which is used to state an activity or action. It can stand by itself and has complete meaning without to.

Examples:

- Sing    Laugh
Auxiliary verb is the verb which helps other verb to form the complete structure. It cannot stand by itself but it needs other verb especially full verb.

Examples:

To be (am, is, are, was, were, be, being, been)
Do, does, did
Have, has, and had.
Modal auxiliaries (may, might, must, have to, had to, would, shall, should, ought to, dare).

Adjective

Adjective is the word which is used to give characteristic of thing and it is put before noun. There are eight kinds of adjectives, they are:

1) Descriptive adjective

Descriptive adjective is the word which is used to show someone’s condition or someone’s characteristic, animal etc.

Examples:

Sick Clever
Happy Pretty

2) Numeral Adjective

Numeral adjective is adjective that indicate number or show the quantity of something. It is divided into three, they are:
(a) Cardinal number  
(b) Ordinal number  
(c) Fraction adjective  
(d) Quantitative Adjective

Quantitative adjective is objective which indicate the number of something, or adjective which indicate how much/many things that we mean. They are: many, much, a lot of, lots of, plenty of, a great many, a great deal of, few, a few, little, a little, etc.

3) Demonstrative Adjective

Demonstrative adjective is adjective which use to show something animals or people that we mean. There are two kinds of demonstrative adjective, they are: definite demonstrative adjective and indefinite demonstrative adjective.

4) Proper Adjective

Proper adjective is adjective which is used to indicate proper noun. Generally it is begun by capital letter, for example the name of day, the name of country, etc.

5) Interrogative Adjective

Interrogative adjective is adjective which is used as question word. It is used to ask noun.

Examples:

What book is this?

Which bag is yours?

6) Possessive Adjective
Possessive adjective is adjective which is used to indicate possession to something. For examples: my, our, your, their, etc.

7) Distributive Adjective

Distributive adjective is adjective which shows that the noun which we mean is many kinds. Examples: each, every, either, etc.

d. Adverb

Kinds of adverbs:

1) Manner: bravely, fast, happily, quickly, well.
2) Place: by, down, here, far, there, up.
3) Time: now, soon, still, then, today, yet.
4) Frequency: always, rather, occasionally, often, twice, never.
5) Sentence: certainly, luckily, surely, definitely.
6) Degree: fairly, hardly, rather, quite.
7) Interrogative: when? Where?
8) Relative: when, where, why.

e. Suffixes and Prefixes

Suffixes are the particles added after the base such as: ly, ish, ful, and so on. There are two kinds of suffixes in English. They are inflectional and derivational. Inflectional suffixes in one that is added to a base for a grammatical reason s or es ending n verbs with subject she, he, it while derivational suffixes change the meaning of the base or change it into a different word class. Prefixes are the particles added before the base such as: un, dis, en, etc.
3. Principle of Vocabulary

a. Focus on the most useful vocabulary first.

b. Focus the vocabulary in the most appropriate way.

c. Give attention to the high frequency words across the four strands of a course.

d. Encourage learners to reflect on and take responsibility for learning.\(^{27}\)

D. Mind Map Technique

1. Definition of Mind Map Technique

   Buzan states that a mind mapping is a powerful graphic technique which provides a universal key to unlock the potential of the brain. It is visual map of ideas, laid out in a radial format around a central thought and it involves a unique combination of imagery, colour and visual-spatial arrangement which is proven to significantly improve recall when compared to conventional methods of note-taking and learning by rote. It needs imagination and association to activate our brain in remembering something.\(^{28}\)

   Mind mapping is a way of linking key concepts using images, lines and links. A central concept is linked via lines to other concepts which in turn are linked with other associated ideas. It is similar as a technique to concept mapping and spider


\(^{28}\text{http://www.usingmindmaps.com/what-is-a-mind-map.html, accessed on May, 13th 2013.}\)
diagrams, the difference being that true mind mapping involves constructing a hierarchy of ideas instead of pure random association.\footnote{Eserald, 2007. \textit{Mind Maps}, (online): (http://www.mind-mapping.co.uk/), accessed on April 14\textsuperscript{th} 2013.}

A mind map is a diagram used to visually outline information. A mind map is often created around a single word or text, placed in the center, to which associated ideas, words and concepts are added. Major categories radiate from a central node, and lesser categories are sub-branches of larger branches.\footnote{Jaimie, 2006. \textit{Mind Map Definition}, (online): (http://en.wikipedia.org/wiki/Mind_map), accessed on September 7\textsuperscript{th} 2012.}

2. The Advantages of Mind Map Technique

a. The relative importance of each idea is clearly indicated by how near it is to the centre, which clearly features the main idea.

b. The links between key concepts will be immediately obvious from their proximity and connection to one another. The brain works primarily with key concepts that it links and integrates. Mind map work in the same way, meaning the recall and review will be faster and more effective.

c. The nature of the mind map structure allows for the easy addition of new information.

d. Each mind map has its own unique pattern, which further aids recall.

e. The open-ended nature of the Mind Map is a great aid to creativity, allowing the brain to make new exciting connections with ease.
f. With practice, you will find Mind Map help you to be your best in every thinking situation.\textsuperscript{31}

3. The Benefits of Mind Map Technique

a. Help students brainstorm and explore any idea, concept, or problem.

b. Facilitate better understanding of relationships and connections between ideas and concepts.

c. Make it easy to communicate new ideas and thought processes.

d. Allow students to easily recall information.

e. Help students take notes and plan tasks.

f. Make it easy to organize ideas and concepts.\textsuperscript{32}

4. The Classification of Mind Mapping Technique

a. Active Mind Maps

The purpose of an active mind map is to communicate a message, not to demonstrate the mind map as a mental literacy tool. A mind map published as a poster, in a book, annual report, or instruction manual has a wide audience. This uses the mind mapping technique as a tool to communicate a message. Reading or interrupting a mind map should be comparable to the experience with a graph, flow diagram, or illustration. The aim is to provide comprehensible information to the recipient. To communicate their messages mind maps use keywords, colours, images,


\textsuperscript{32}Ibid.
typography, lines and structure. Exposure to many different mind maps at home, in school, at work, and in everyday life, contributes to their understanding and acceptance. Worldwide people will learn to read mind maps in the same way that they read a graph, a flow diagram, or an illustration. Knowing how to read a mind map is a giant step towards learning how to create mind maps.

b. Passive Mind Maps

A student learning the laws of mind mapping creates examples, with the aim of demonstrating technique. The purpose is education and the experience is personal, or limited to a student-tutor relationship. Being hand drawn, as is necessary, precludes making significant changes. Often the mind map lacks direct application, as it is hypothetical.33

5. Parts of Mind Map Technique

There are some parts of mind mapping, namely; a) central image, b) key word, c) basic ordering ideas, d) branches, e) colour and f) picture.

a) Central Image

A central image has to describe the main idea of a mind mapping and put it on the centre of the paper. It is for activate the students’ right brain, strengthen the students’ memory and make the learning activity enjoyable.

b) Key Word

---

A key word is a word that can lead a sentence or event. Identifying a familiar word in one’s own language or another language that sounds like the new word and using only one key word per line. It is as an urge to remember a lot of words for the students. It is strong noun or verb that creates image to trigger recall the memory.

c) Basic Ordering Ideas

Basic ordering ideas are the branches that collect sort information and it connected to the central topic that radiate out from the centre. Making basic ordering ideas which can direct our mind to make mind mapping and it need creativity that encourage the students to understand to the material. It is thick and thinner at the ends. It can be seen as headings for your topic and spread anywhere but do not become steep.

d) Branches

The branches should be curvy and in the same length as the words or pictures above it. These branches can be seen as sub headings. It is thinner branches and containing details.

e) Colour

Colour is a very good memory sign and it involves the right brain in learning for long term memory. Colours encourage creativity and help in memorization. Adding plenty of colours via branches, map background and images will add life to your mind map. It makes easier to comprehend and remember.
f) Picture

In mind mapping, pictures which can change or strengthen a key word that has been written before.\(^\text{34}\)

6. The Guidelines of Mind Map Technique

Buzan suggests the following guidelines for creating mind maps:

a. Start in the centre with an image of the topic, using at least three colors.
b. Use image, symbols, codes, and dimensions throughout your mind map.
c. Select key words and print using upper or lower case letters.
d. Each word/image is best alone and sitting on its own line.
e. The lines should be connected, starting from the central image. The central lines are thicker, organic and thinner as they radiate out from the centre.
f. Make the lines the same length as the word/image they support.
g. Use multiple colors throughout the mind map, for visual stimulation and also to encode or group.
h. Develop your own personal style of mind mapping.
i. Use emphasis and show associations in your mind map.
j. Keep the mind map clear by using radial hierarchy, numerical order or outlines to embrace your branches.

---

This list is itself more concise than a prose version of the same information and the mind map of these guidelines is itself intended to be more memorable and quicker to scan than either the prose or the list.\(^{35}\)

\textbf{E. Theoretical Framework}

In this research, the researcher would like to find out the relationship between the Pictured mind map technique and the students’ achievement in mastery English vocabulary. The theoretical framework in this research is shown in the diagram as follows:

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{diagram.png}
\caption{Theoretical Framework Diagram}
\end{figure}

\(^{35}\)Wikipedia, free-online-mindmapapplication, (online): (http://www.mind_map.htm), accessed on April, 14\textsuperscript{th} 2013.
The diagram above, shows the way the researcher will be conduct the research at MTs SA Datok Sulaiman Palopo, in which the researcher conduct research on students at MTs SA Datok Sulaiman Palopo and focused on mastery vocabulary by conducting pre-test at first meeting, the treatments in six times meeting. In the treatments, the researcher use mind mapping technique in mastery vocabulary. In the last meeting, the researcher gives the students post-test. After conducting the three items above, the researcher analyzed the students’ achievements in mastery vocabulary.

F. Hypothesis

In this research, based on the writer proposed, the hypothesis as follow:

\[ H_0 \] = Mind Map Technique can upgrade vocabulary at the eighth year students of MTs Satu Atap Datok Sulaiman Palopo.

\[ H_1 \] = Mind Map Technique cannot upgrade vocabulary at the Eighth year students of MTs Satu Atap Datok Sulaiman Palopo.
CHAPTER III
METHOD OF THE RESEARCH

A. Method and Design

1. Method

The method that researcher applied in this research was pre experimental method, it aims at finding out whether or not use of mind map technique can improve students’ English vocabulary mastery at MTs Satu Atap Datok Sulaiman Palopo.

2. Design

This research involved one group of students with pre-test and post-test design. The pre-test would be done before treatment by giving written test to the student, the aim of this activity was to find out the pre knowledge of the students ($O_1$). After conducting pre-test, the researcher gave a treatment by teaching English vocabulary through mind map technique ($X$). The last activity was giving post-test to identify the students’ ability in mastery vocabulary ($O_2$). The design of this research can be described as follows:

Pattern = $O_1$ X $O_2$

Where:

$O_1$ = pre-test

$X$ = treatment
O$_2$ = post-test.$^1$

**B. Research Variable**

In this research, the researcher determined two categories of variables. They were dependent and independent variable.

1. Dependent variable this study is the students’ scores in the vocabulary test.

2. Independent variable of this study is mind map that are presented to the students.

**C. Population and Sample**

1. Population

The population of this research was the students of the eighth year students of MTs Satu Atap Datok Sulaiman Palopo. The total population was 23 students from one class in 2012/2013 Academic Year.

2. Sample

The sample of the research was applied census sampling. It means the research was employed all population as the sample. The eighth year students of MTs SA Datok Sulaiman Palopo consist of 23 students so there were 23 students as the sample.

---

D. Instrument of the Research

In this research, the researcher used vocabulary test as the instrument to collect data. Selected noun used to measure the students ability in mastering English vocabulary. The students would be given pre-test, treatment and post-test. In pre-test was consisted of 50 words and they ask to say the English words. In pre-test was consisted of 50 words and they ask to say the English words.

E. Procedure of Collecting Data

The procedure of collecting data will be held with sequence as follows:

1. Pre-test

   The researcher gave pre-test to the experimental class, and it intends to know that the students prior knowledge of vocabulary. It will take 60 minutes to finish it.

2. Treatment

   After giving pre-test, the researcher conducted treatments. There are six steps, such as:

   a. The first treatment, the researcher explained to the students about vocabulary (definition, kinds and types of vocabulary), and about mind map technique.
   b. The second treatment, the researcher used mind map technique in teaching vocabulary especially most common noun (people).
   c. The third treatment, the researcher used mind map technique in teaching vocabulary especially most common noun (things).
d. The fourth treatment, the researcher used mind map technique in teaching vocabulary especially most common noun (place).

e. The fifth treatment, the researcher used mind map technique in teaching vocabulary especially most common noun (animals).

f. The sixth treatment, the researcher used mind map technique in teaching vocabulary especially most common noun (parts of the body).

3. Post-test

After giving treatments, the researcher gave post-test to the experimental class, and it intends to know the students’ achievement in mastery vocabulary. It will take 60 minutes to finish it.

F. Technique of Analysis Data

The data analysis technique involves some steps that are elaborated as follows:

1. Scoring the students’ correct answer by the following formula:

\[
\text{Score} = \frac{\text{Students’ Correct Answer}}{\text{Total Number}} \times 10
\]

2. Scoring classifying the students’ score by using percentage below:

\[
P = \frac{F}{N} \times 100 \%
\]

Where:
P = percentage

F = the cumulative frequency of subjects

N = total number of subject

3. Calculating the mean score of the students:

\[ M = \frac{\sum X}{N} \]

Where:

M = Mean Score

\( \sum X \) = Total of the Raw Score

N = Total Number of Respondent.

4. To understand the level of the student’s score the following classification were used:

a. Excellent = 8.5 – 10 is classified as excellent

b. Good = 7.0 – 8.4 is classified as good.

c. Fairly = 5.5 – 6.9 is classified as fairly.

d. Poor = 4.0 – 5.4 is classified as poor.

e. Bad = 0.0 – 3.9 is classified as bad

---

2 Ibid. Suharsimi Arikunto, p. 85.

5. To find out the result of test significance

\[ t = \frac{Md}{\sqrt{\frac{\sum x^2d}{N (N-1)}}} \]

Where:

- \( t \) = test significance
- \( Md \) = mean difference
- \( x^2d \) = squared deviation
- \( N \) = total sample

\[ ^4 \text{Ibid, Suharsimi Arikunto, p. 298.} \]
This chapter consists of two parts. The first part is the finding of data analysis and the second part is the description of finding.

A. Findings

The data analysis through quantitative analysis. It was used to get the score of respondents. The score of respondent for vocabulary test can be explained separately as follow:

1. The students score on the pre-test and post-test

<table>
<thead>
<tr>
<th>No</th>
<th>Respondent</th>
<th>Correct Answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R1</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>R2</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>R3</td>
<td>16</td>
<td>3,2</td>
</tr>
<tr>
<td>4</td>
<td>R4</td>
<td>14</td>
<td>2,8</td>
</tr>
<tr>
<td>5</td>
<td>R5</td>
<td>12</td>
<td>2,4</td>
</tr>
<tr>
<td>6</td>
<td>R6</td>
<td>16</td>
<td>3,2</td>
</tr>
<tr>
<td>7</td>
<td>R7</td>
<td>14</td>
<td>2,8</td>
</tr>
<tr>
<td>8</td>
<td>R8</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>R9</td>
<td>16</td>
<td>3,2</td>
</tr>
<tr>
<td>10</td>
<td>R10</td>
<td>16</td>
<td>3,2</td>
</tr>
<tr>
<td>11</td>
<td>R11</td>
<td>12</td>
<td>2,4</td>
</tr>
</tbody>
</table>
The table 1 above shows that the eighth year students of MTs SA Datok Sulaiman Palopo in answering vocabulary test, there were 5 students got score 4, there were 4 students got score 3,6, there were 6 students got score 3,2, there were 6 students got score 2,8, and there were 2 students got score 2,4.

Table 4.2.
Score Classification of the Students’ Vocabulary in Pre-Test

<table>
<thead>
<tr>
<th>Classification</th>
<th>Score</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>8,5 -10</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Good</td>
<td>7,0 – 8,4</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Fairly</td>
<td>5,5 – 6,9</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>Poor</td>
<td>4,0 – 5,4</td>
<td>5</td>
<td>21,7%</td>
</tr>
<tr>
<td>Bad</td>
<td>0,0 – 3,9</td>
<td>18</td>
<td>78,3%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23</td>
<td>100%</td>
</tr>
</tbody>
</table>
The table 2 above shows that the criteria and percentage of the students’ vocabulary in pre-test, there were none students got “excellent” category, there were none students got “good” category, there were none students got “fairly” category, there were 5 (21,7%) students got “poor” category, and 18 (78,3%) students got “bad” category.

<table>
<thead>
<tr>
<th>No</th>
<th>Respondent</th>
<th>Correct answer</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R1</td>
<td>48</td>
<td>9,6</td>
</tr>
<tr>
<td>2</td>
<td>R2</td>
<td>46</td>
<td>9,2</td>
</tr>
<tr>
<td>3</td>
<td>R3</td>
<td>28</td>
<td>5,6</td>
</tr>
<tr>
<td>4</td>
<td>R4</td>
<td>28</td>
<td>5,6</td>
</tr>
<tr>
<td>5</td>
<td>R5</td>
<td>24</td>
<td>4,8</td>
</tr>
<tr>
<td>6</td>
<td>R6</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>R7</td>
<td>28</td>
<td>5,6</td>
</tr>
<tr>
<td>8</td>
<td>R8</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>R9</td>
<td>26</td>
<td>5,2</td>
</tr>
<tr>
<td>10</td>
<td>R10</td>
<td>28</td>
<td>5,6</td>
</tr>
<tr>
<td>11</td>
<td>R11</td>
<td>28</td>
<td>5,6</td>
</tr>
<tr>
<td>12</td>
<td>R12</td>
<td>48</td>
<td>9,6</td>
</tr>
<tr>
<td>13</td>
<td>R13</td>
<td>48</td>
<td>9,6</td>
</tr>
<tr>
<td>14</td>
<td>R14</td>
<td>32</td>
<td>6,4</td>
</tr>
<tr>
<td>15</td>
<td>R15</td>
<td>36</td>
<td>7,2</td>
</tr>
<tr>
<td>16</td>
<td>R16</td>
<td>36</td>
<td>7,2</td>
</tr>
<tr>
<td>17</td>
<td>R17</td>
<td>32</td>
<td>6,4</td>
</tr>
<tr>
<td>18</td>
<td>R18</td>
<td>32</td>
<td>6,4</td>
</tr>
<tr>
<td>19</td>
<td>R19</td>
<td>30</td>
<td>6</td>
</tr>
</tbody>
</table>
The table 3 above shows that the eighth year students of MTs SA Datok Sulaiman Palopo in answering vocabulary test, there were 4 students got score 9,6, there was 1 student got score 9,2, there were 2 students got score 7,2, there were 5 students got score 6,4, there were 4 students got score 6, there were 5 students got score 5,6, there was 1 student got 5,2, and 1 student got score 4,8.

**Table 4.4.**

**Score Classification of the Students’ Vocabulary in Post-Test**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Score</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>8,5–10</td>
<td>5</td>
<td>21,7%</td>
</tr>
<tr>
<td>Good</td>
<td>7,0–8,4</td>
<td>2</td>
<td>8,7%</td>
</tr>
<tr>
<td>Fairly</td>
<td>5,5–6,9</td>
<td>14</td>
<td>60,9%</td>
</tr>
<tr>
<td>Poor</td>
<td>4,0–5,4</td>
<td>2</td>
<td>8,7%</td>
</tr>
<tr>
<td>Bad</td>
<td>0,0–3,9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23</td>
<td>100%</td>
</tr>
</tbody>
</table>

The table 4 above shows that the eighth year students of MTs Satu Atap Datok Sulaiman Palopo in answering vocabulary test, there were 5 (21,7%) students got “excellent” category, there were 2 (8,7%) students got “good” category, there
were 14 (60.9%) students got “fairly” category, there were 2 (8.7%) students got “poor” category and there was none of students got “bad” category.

**Table 4.5.**

The Gain (d) of Students’ Vocabulary in Pre-Test and Post-Test

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Variable X1 (pre-test)</th>
<th>Variable X2 (post-test)</th>
<th>d (Gain) Y-X</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>4</td>
<td>9.6</td>
<td>5.6</td>
</tr>
<tr>
<td>R2</td>
<td>4</td>
<td>9.2</td>
<td>5.2</td>
</tr>
<tr>
<td>R3</td>
<td>3.2</td>
<td>5.6</td>
<td>2.4</td>
</tr>
<tr>
<td>R4</td>
<td>2.8</td>
<td>5.6</td>
<td>2.8</td>
</tr>
<tr>
<td>R5</td>
<td>2.4</td>
<td>4.8</td>
<td>2.4</td>
</tr>
<tr>
<td>R6</td>
<td>3.2</td>
<td>6</td>
<td>2.8</td>
</tr>
<tr>
<td>R7</td>
<td>2.8</td>
<td>5.6</td>
<td>2.8</td>
</tr>
<tr>
<td>R8</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>R9</td>
<td>3.2</td>
<td>5.2</td>
<td>2</td>
</tr>
<tr>
<td>R10</td>
<td>3.2</td>
<td>5.6</td>
<td>2.4</td>
</tr>
<tr>
<td>R11</td>
<td>2.4</td>
<td>5.6</td>
<td>3.2</td>
</tr>
<tr>
<td>R12</td>
<td>4</td>
<td>9.6</td>
<td>5.6</td>
</tr>
<tr>
<td>R13</td>
<td>3.6</td>
<td>9.6</td>
<td>6</td>
</tr>
<tr>
<td>R14</td>
<td>2.8</td>
<td>6.4</td>
<td>3.6</td>
</tr>
<tr>
<td>R15</td>
<td>3.6</td>
<td>7.2</td>
<td>3.6</td>
</tr>
<tr>
<td>R16</td>
<td>3.2</td>
<td>7.2</td>
<td>4</td>
</tr>
<tr>
<td>R17</td>
<td>3.2</td>
<td>6.4</td>
<td>3.2</td>
</tr>
<tr>
<td>R18</td>
<td>2.8</td>
<td>6.4</td>
<td>3.6</td>
</tr>
<tr>
<td>R19</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>R20</td>
<td>3.6</td>
<td>9.6</td>
<td>6</td>
</tr>
</tbody>
</table>
The table 5 above shows that the total number (N) is 23 the sum of the score in pre-test (X₁) is 75,2, the sum of pre-test (X₂) is 156 and the sum of gain between pre-test and post-test (D) is 80,8. The lowest gain is 2 and the highest gain is 6.

2. The mean score of students in pre-test and post-test

The mean score of students the pre-test (MX₁) as follow:

\[
MX₁ = \frac{\sum X₁}{N}
\]

Where:

\[
MX₁ = \text{Mean Score X₁}
\]
\[
\sum X₁ = \text{Total Score}
\]
\[
N = \text{Total Sample}
\]

\[
MX₁ = \frac{75,2}{23}
\]

\[
= 3,269
\]

The mean score of students in post-test (MX₂) as follow:

\[
MX₂ = \frac{\sum X₂}{N}
\]
The mean score of students in pre-test 3,269 and the mean score of students in post-test 6,783. The mean score of students in post-test is greater than the mean score of students in pre-test. It means that the students’ ability was improved.

3. Standard Deviation of pre test:

\[
SD = \sqrt{\frac{n(\sum x)^2 - (\sum x)^2}{n(n-1)}}
\]

\[
= \sqrt{\frac{23(75,2)^2 - (75,2)^2}{23(23-1)}}
\]

\[
= \sqrt{\frac{23(5655,04) - (5655,04)}{23(22)}}
\]

\[
= \sqrt{\frac{130065,92 - 5655,04}{506}}
\]

\[
= \sqrt{245,8713}
\]

\[
= 15,6803
\]
4. Standard Deviation of Post-test

\[
SD = \sqrt{\frac{n (\sum x^2)^2 - (\sum x^2)^2}{n(n-1)}}
\]

\[
= \sqrt{\frac{23 (156)^2 - (156)^2}{23 (23 - 1)}}
\]

\[
= \sqrt{\frac{23 (24336) - (24336)}{23 (22)}}
\]

\[
= \sqrt{\frac{559728 - 24336}{506}}
\]

\[
= \sqrt{1058,087}
\]

\[
= 32,528.2
\]

Table 4.6.

<table>
<thead>
<tr>
<th>Component</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Deviation</td>
<td>15,6803</td>
<td>32,5282</td>
</tr>
</tbody>
</table>

Table 6 above shows that standard deviation of pre-test was lower than post-test, where standard deviation of pre-test was 15,6803 and standard deviation of post-test was 32,5282.
5. Test of Significance

To know whether or not significance on improvement of students’ ability in mastering vocabulary, the researcher calculated the different mean (Md) standard deviation (Xd), square of deviation (X) and the result of the significant of students’ ability in mastering vocabulary. They are presented as follow:

a. T-test

\[
t = \frac{Md}{\sqrt{\frac{\sum X^2 d}{N (N-1)}}}
\]

Where:

- \( t \) = \( t \) test
- \( Md \) = Mean difference
- \( \sum X^2 d \) = the sum of standard deviation
- \( N \) = total sample

The mean different between pre-test and post-test (Md) as follow:

\[
Md = \frac{\sum d}{N}
\]

\[
= \frac{80,8}{23}
\]

\[
= 3,513
\]
\[ t = \frac{3.513}{\sqrt{\frac{37.1050}{23(23 - 1) \sqrt{3.513}}} = \frac{37.1050}{23(22) \sqrt{3.513}}} = \frac{37.1050}{506 \sqrt{3.513}} = \sqrt{0.073} = 0.270 \]

T-test = 13.011

b. T-table

Level of Significance (\( \alpha \)) = 0.05 or 5%

Degree of Freedom (df) = n-1

= 23-1

= 22

T-table = \( t(1-\frac{1}{2}\alpha, df) \)

= \( t(1-\frac{1}{2} 0.05, 22) \)

= \( t(0.975, 22) \)
\[= 21.5 \]
\[= t_{2,819} \text{ (to find out in } t\text{-table)} \]

The testing \( t\)-table shows that, \( t\)-test \((13,011)\) is bigger than \( t\)-table \((2,819)\). When \( t\)-test is bigger than \( t\)-table \((t\)-test > \( t\)-table\), the students’ vocabulary was improved.

c. The mean score and result of “\( t\)” test

The researcher use the level of significance or standard significance \((\alpha) = 0.05\) to find out the acceptability hypothesis and the degree of freedom \((df) = n-1.\) \( df = 23-1 = 22.\) The result of \( t\)-test \(= 13,011\) will be analysis by testing criteria “\( t\)” table \((t\)-table\). After finding \( df\), we consult \( df\) by using the table “\( tt\)” standard of significance 5\% with \( df= 22\) got 2,819. From the result above, the researcher give interpretation that \( t\)-table smaller than \(t\)’ value.

**Table 4.7.**
**Mean Score**

<table>
<thead>
<tr>
<th>Type of Mean</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test</td>
<td>3,269</td>
</tr>
<tr>
<td>Post-Test</td>
<td>6,783</td>
</tr>
</tbody>
</table>

**Table 4.8.**
**Result of “\( t\)” test**

<table>
<thead>
<tr>
<th>Type of Mean</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>t- test</td>
<td>13,011</td>
</tr>
<tr>
<td>t- table</td>
<td>2,831</td>
</tr>
</tbody>
</table>
The table 7 above, shows that the mean score of the post-test is greater that mean score of pre-test (6,783 > 3,269). The table 8 above, shows that the result of t-test is greater than the result of t-table (13,011 > 2,831), the data indicates that the students’ English vocabulary in MTs SA Datok Sulaiman Palopo was improved.

d. Criteria of hypothesis acceptability

\[
\text{t-table} < \text{t-test} > \text{t-table} = \text{reject null hypothesis} \\
\text{t-table} > \text{t-test} < \text{t-table} = \text{receive null hypothesis}
\]

As we shown that t-test = 13,011 > t-table = 2,831. So, the researcher concludes that the null hypothesis is rejected while the alternative hypothesis received. It means that the mind map technique is effective in teaching vocabulary to the Second Year Students of MTs SA Datok Sulaiman Palopo.

**B. Discussions**

MTs Satu Atap Datok Sulaiman Palopo is a formal educational institution that is hoped can produce students who have capability in English. Educational institution has put English curriculum as a compulsory subject in every level of educatin such as elementary, etc. if students want to develop their knowledge, they should learn English because most of scientific books are written in English.

Mastering vocabulary is an important thing for who want understand text in English. Vocabulary mastery is one of dominant factor in language learning. Vocabulary plays an important role in learning any languages especially in second language or foreign language. In this case, the teacher should choose appropriate
method and technique to make teaching atmosphere are fresh and interesting in order to motivate students to learn.

One of the technique in teaching vocabulary is mind map technique. The basic premise of the mind map technique is that second language learning should be more like first language learning spontaneous of the language.\(^1\)

Based on the data of vocabulary in pre-test, it can be seen that there were none students got “excellent” category, there were none students got “good” category, there were none students got “fairly” category, there were 5 (21,7\%) students got “poor” category, and 18 (78,3\%) students got “bad” category.

The data of vocabulary in post-test, it can be seen that there were 5 (21,7\%) students got “excellent” category, there were 2 (8,7\%) students got “good” category, there were 14 (60,9\%) students got “fairly” category, there were 2 (8,7\%) students got “poor” category and there was none of students got “bad” category.

Looking at the result of data analysis, the researcher presents the discussion of data given to the students. The students are lack of vocabulary in English with mean score 3,269 based on the pre-test. After they were taught six times through Mind Map Technique, the students achievement increase with mean score 6,783 based on the result of post-test. It means that the total score between the result of pre-test and post-test are significantly different. This different is proved by calculating the difference of

both test by using t-test analysis were the value $13.011$ is greater than t-table value $2.831$ for $\alpha = 0.05$ level of significance.

The result of the data analysis above shows that Mind Map Technique has effect in improving vocabulary it means that after giving treatment through Mind Map Technique, the students’ ability in mastering vocabulary is better than before giving treatment where after the treatment, the highest score that students got was $9.6$ and the lowest score was $4.8$. This is indicate that Mind Map Technique give positive aim to English teacher to teach their students especially into upgrade students’ ability in mastering vocabulary.
CHAPTER V

CONCLUSION AND SUGGESTIONS

A. Conclusion

Based on the result of the data analysis in the previous chapter, the researcher would like to conclude that the students’ ability in mastering English vocabulary at the eighth year students of MTs SA Datok Sulaiman Palopo was improved after teaching English vocabulary by using mind map technique.

There is significance difference between the result of pre-test and post-test, where the mean score of the post-test is 6,783 which is higher than the mean score of the pre-test 3,269. From the t-test value 13,011 was greater than t-table 2,831. The writer can draw a conclusion that using Mind Map Technique is effective in developing students’ vocabulary to the Eighth Year students of MTs SA Datok Sulaiman Palopo.

B. Suggestions

Based on the result of the data analysis and conclusions, the researcher gives some suggestions as follows:

1. The students should be encouraged enough to memorize and use their vocabulary in their real life. Particularly, by Mind Map Technique.
2. The teacher should give priority to the use of Mind Map technique to improve their students’ vocabulary.

3. The teacher should always activate the students to use vocabulary continuously.

Finally, the researcher realizes that this thesis is still far from perfect. However, the writer really hopes that this thesis can be meaningful for contribution for English teachers as well as students.