

**THE EFFECTIVENESS OF FRAYER MODEL STRATEGY
IN TEACHING VOCABULARY AT SMAN 1 NAWANGAN
PACITAN**

THESIS



By

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ABSTRACT

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Key Words: Frayer Model Strategy, Teaching Vocabulary

Vocabulary is a list or collection of words usually alphabetically arranged and explained or lexicon, stock of words use in language. Teaching vocabulary is an important aspect of learning a language as languages are based on words. It is almost impossible to learn a language without words; even communication between human beings is based on words.

The aim of this research was to examine whether there was a significant difference between students' vocabulary mastery who were taught by Frayer Model Strategy and those who were not taught by Frayer Model Strategy at SMAN 1 Nawangan.

The researcher applied a quantitative approach used a quasi-experimental design. This research took two classes which are taught using different strategy. The experiment class was taught using Frayer Model strategy and the control class was taught using conventional method. The population of the research was tenth grade students of SMAN 1 Nawangan. The total number of population was 106 students. The sampling of the research was cluster random sampling. From the population, two classes were taken randomly as the sample. The samples were class X IPS 1 as the experimental class and class X IPS 2 as the control class. Both of them consisted of 29 students. The technique of collecting data used a test consist of pre-test and post-test. The data was analyzed by using t-test formula in SPSS version 23.

The result of this research showed that there was a significant difference between students' vocabulary mastery who were taught by Frayer Model Strategy and those who were not taught by Frayer Model Strategy at SMAN 1 Nawangan. The result of computation of t-test showed that $t > t_{table}$ ($4,217 > 2,003$) for level significance 0.05, H_0 was rejected and H_a was accepted. It means that Frayer model strategy was effective in teaching vocabulary at the tenth grade of SMAN 1 Nawangan Pacitan.

APPROVAL SHEET

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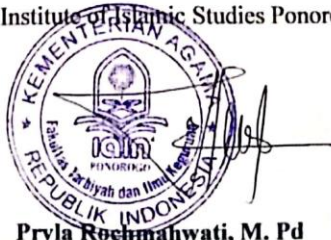
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CHAPTER I

INTRODUCTION

A. Background of The Study

In the second language or foreign language learning, it is widely acknowledged that vocabulary is an indispensable part of the four language skills. For second language (ESL) or foreign language (EFL) learners, vocabulary is one of the important language elements that support the skills of speaking, listening, reading, and writing.¹ Vocabulary is one of the basic components that must be mastered in learning English before learn about the four language skills (listening, speaking, reading, and writing). The other reason is that vocabulary included in the important part of English learning, and vocabulary itself depends on the word that builds the knowledge in four language skills.

According to Celik Vocabulary is generally considered as the basic communication tool, and often labeled as the most problematic area by language teachers. Even though the learners have mastered all grammatical areas in the language, communication stops when they do not know the necessary word.²

Vocabulary is an essential area of language teaching and learning. It means that when people learn a language, people also are

¹Nathaya Boonkongsan, "Factors Affecting Vocabulary Learning Strategies: A Synthesized Study", *Naresuan University Journal* (Vongchavalitkul University, 2012), 45.

²Fahime Farjami, "Analysis of the Impediments to English Vocabulary Learning and Teaching," *International Journal of Language and Linguistics*(Science Publishing Group: Iran, 2013), 1-5.

earning their vocabulary too. So, vocabulary is one of the components of language that cannot be separated in the learning of language.

In other words, to master a foreign language we have to master the vocabulary first. Besides, with a lot of vocabulary, a person can speak English better. Therefore all of the students must have a lot of vocabulary to make them easy to learn a foreign language. If the students can master vocabulary more, the students will get better in their English mastery. When the students can master the vocabulary, it means that the students can understand and use vocabulary. The mastery of the vocabulary also related to words and meanings.

People cannot translate the meaning of the story, novel, also people can not understand what other people say when there do not understand vocabulary. On the other hand, there is a very close relationship between the active use of language skills and vocabulary. Students who do not mastery a sufficient vocabulary or have a limited vocabulary cannot be expected to be successful in reading and other skills. Because the level of an individual's vocabulary knowledge affects learning and the active use of the four skills directly. The learners who have rich and strong vocabulary knowledge can use reading skills more effectively.³ Besides, Reading is an important part of all but the most elementary of vocabulary programs. For all intermediate and advanced learners with vocabularies above three

³ Bahadur Eristi and Mustafa Polat, "The Effectiveness of Synectics Instructional Model on Foreign Language Vocabulary Teaching, *International Journal of Languages Education and Teaching* Volume 5, Issue 2, June 2017), 60.

thousand or so words, reading offers a portal of exposure to all remaining words. Even beginning students with a limited vocabulary can benefit from reading, by accessing *graded readers* (books written with a controlled vocabulary and limited range of grammatical structures). A typical graded reader series consists of books written at 5-6 vocabulary levels. A *graded reader* may have say; 6-8 difficulty levels from ‘Starter’ to Advanced with dozens of books at each level each of approximately equal difficulty.⁴ For elementary and intermediate foreign or second language learners, *graded readers* need to play an important role. This is because the various levels of graded readers provide ideal vocabulary coverage conditions for a range of levels achievement within the elementary and intermediate levels. These readers cover the 300 to 3000 word vocabulary range.⁵ Of course, many words can be learned incidentally through verbal exposure, but considering that spoken discourse is associated with more frequent words and lower.

In this study, the researcher took the narrative text for teaching vocabulary. Because narrative text tells us about an interesting story that has the purpose to entertain for the readers and that can make students enjoy reading.

⁴The Extensive Reading Foundation Guide to Extensive Reading. www.erfoundation.org accessed on 23 Oktober 2020

⁵Rob Waring and Paul Nation, “Second Language Reading and Incidental Vocabulary Learning” *Journal of Angles on The Speaking English World* Volume 4 (Notre Dame Seiahin University, 2004), 13.

In English language teaching, it is suggested that teaching vocabulary should not only consist of teaching specific words but also intend to equipping learners with strategies necessary to expand their vocabulary knowledge.⁶

Harmer states that teaching vocabulary is more than just presenting new words. Furthermore, he stated that vocabulary teaching is part of language teaching.⁷ It means that when the teacher teaches vocabulary to their students, they must know about the students' characteristics. So the teacher can choose the appropriate strategies that makes the students enjoy while teaching and learning process in class.

An enjoyable teaching and learning process can be created with interesting strategy. The teacher should follow the students' way of teaching and learning process because every student has a different way to learn anything, especially in the teaching and learning process. Also, the teacher should be creative people to create a fun learning situation in the classroom. Its because by using fun learning strategy, teachers can help students get easier to understand the material while teaching and learning process. Therefore, using interesting strategy while teaching and learning processes in the English language will help the students in mastering their specific vocabulary and their general English skills.

⁶*Ibid*, 1

⁷Jeremy Harmer, *English Language Teaching* (Longman, 2001), 125.

The other problem while teaching and learning vocabulary is the students' memories about vocabulary itself. Students are confronted with the problem of forgetting the words immediately after the teacher has elicited their meaning or after they have looked them in the dictionary.

Although, there are several mnemonic devices (memory strategy) that is very helpful to keep words in the student's long-term memory to deepen the intake of inputs, and also to facilitate taking another stage. But, the students still feel that memorizing vocabulary is a difficult thing.⁸

Based on Oxford, language learners have a serious problem remembering the large amounts of the vocabulary necessary to achieve fluency. Lack of sufficient input and output are the sources that result in forgetting. Forgetting happens when the students cannot remember words once they have learned.⁹ Based on that statement, we can conclude that students also have a problem with their memorizing especially in memorizing vocabulary. It is caused by many factors like students who did not have a clear goal when learning English vocabulary. Also students' did not have an effective strategy in memorizing English vocabulary.

⁸Fahime Farjami, "Analysis of the Impediments to English Vocabulary Learning and Teaching," *International Journal of Language and Linguistics*(Science Publishing Group: Iran, 2013), 1.

⁹Oxford, Rebecca L. *Language Learning Strategies*.(Boston: Heinle Publishers, 1990),38.

Based on observations and interviews with students at SMAN 1 NAWANGAN, the researcher found students' difficulties in learning English. Firstly, some students get difficulties to read the text. Itsbecause them lazy to read it. It concluded that the students not interested in learning English. Secondly, the students still do not have understanding vocabulary or sentence in speaking English. It makes they get difficulties speaking English fluently. The last, the difficulties on writing and translating sentence. During the interview, the researcher found that some students had difficulty in mastering English vocabulary. They have a limited vocabulary to master the meaning of words. So, they still have difficulty translating from each word. Besides, the teaching strategies used by teachers make students bored. The strategy did not support the students to make them interested in the lesson.¹⁰

Meanwhile, based on observation, the researcher found the students' difficulties to communicate fluently in English. Therefore this situation makes them lazy and not confident to study English especially in the study about English vocabulary.¹¹ So, in the teaching and learning process, the teacher should prepare and find out the appropriate strategy which will be implemented to the students. A teacher should prepare himself or herself with various and appropriate strategies.

¹⁰Based on interview students, 10 February, 09.00-09.30 WIB

¹¹ Based on observations, 10 February, 09.00-09.30 WIB

Based on an interview with an English teacher at SMAN 1 Nawangan Pacitan Mrs.Erni, She said that the students had some problems in learning English, especially in vocabulary. The problems were some students passive while teaching and learning process. She mentioned that students lack vocabulary mastery. They get difficulty when they deal with a text because they do not know the meaning of the words. Also, they do not know the context of the word usage. During the teaching and learning process in class, teaching strategies used are conventional methods that have been marked by lectures accompanied by explanations, as well as the division of tasks and exercises. If the students faced some difficulties in vocabulary, the teacher just asked them to look up the meaning of some difficult words in the dictionary by themselves.¹² In addition, the use of media by teacher was not interested. Its because the teacher rarely have any other media apart from textbooks. The use of textbooks causes another factor like students laziness. Besides, the English teacher has to able to organize the teaching and learning activities in the classroom. The teacher has to give materials by using a suitable strategy. Therefore, teacher must be creative to develop the components of teaching. One of the teaching components that are no less important is the strategies used for teaching-learning process. A good strategy may make students understand and master the lesson. Based on the situation, the teacher

¹²Based on interview teacher, 23 January, 13.00-13.45 WIB

must have strategies in teaching and learning process. There are several strategies concerning the teaching of vocabulary. According to Nation is memory strategy, he considered the memory strategies to be vital, and Oxford considered them as powerful mental tools in dealing with vocabulary learning difficulties as they make learning easier, faster, more enjoyable, more self-directed, and more transferable to new situations.¹³ According to Dorothy Frayer was develop Frayer Model, Frayer model is a strategy for vocabulary. In this strategy using a graphic organizer that helps students determine or clarify the meaning of vocabulary words encountered while listening, reading, writing, and viewing text.¹⁴ The graphic organizer is one of tool to employ in teaching vocabulary. This graphic divided into four quadrants (Definition, Characteristics, Examples, and Non-Examples).

In this research, the researcher chooses Frayer Model strategy. The reason for choosing Frayer Model to teach the students vocabulary. This strategy to identify and define unfamiliar concepts and vocabulary. Frayer model strategy is one of ways that can help student understanding their English vocabulary. According to Nation aspects of word knowledge, the Frayer model word card not only helps learners understand the written form of a word and make connections between the word form and its meaning but also, with the

¹³Fahime Farjami, Analysis of the impediments to English vocabulary learning and teaching, *International Journal of Language and Linguistics* (Science Publishing Group: Iran, 2013), 1-5

¹⁴*IQ-MS Research Project, Disciplinary Literacy Strategies – Frayer Model and Student HOCopyright 2012 S2TEM Centers SC www.s2temsc.org*

inclusion of examples and attributes, helps to uncover the word's related meanings.¹⁵ Students can define a word or term, describe their basic characteristics, provide examples of ideas, and suggest examples of existing ideas (knowing what concepts do not help define what they are). This is placed on a chart divided into four parts to provide a visual representation for students. This model encourages students to understand words in a larger context of reading choices because it asks students to analyze words (definitions and characteristics) and then synthesize or apply them by thinking of examples and not examples. It also activates previous knowledge about a topic and establishes connections.¹⁶

Based on the background, the researcher would like to investigate the use of Frayer model in teaching vocabulary with the title:

The Effectiveness of Frayer Model Strategy in Teaching Vocabulary at SMAN 1 Nawangan Pacitan.

B. Limitation of The Study

The limitation of the research is focused on using Frayer model strategy in teaching vocabulary about a noun, verb, adjective

¹⁵Nation, I, S.P, *Learning Vocabulary in Another Language*. Cambridge: Cambridge University, 2001), 326.

¹⁶ Frichardson, *Vocabulary Strategy Frayer Model*, (Navan Education Centre : National Behaviour Support Service, 2016), 2.

(synonyms, antonyms, a word in sentences, similar meaning) in Narrative text to the tenth grade at SMAN 1 Nawangan Pacitan in Academic Year 2019/2020.

C. Statement of Problem

Do students who were taught using Frayer model strategy get better vocabulary mastery than the students who were not?

D. Objectives of the Study

objective of the research is to know whether students who were taught using Frayer model strategy get better vocabulary mastery than the students who were not?

E. Significances of the Study

The significances of the research are as follows:

- 1) Theoretically
 - a). The result of this study is expected to help the reader to know and also using Frayer model strategy in teaching vocabulary to improve student's vocabulary mastery.
 - b). This study can become a reference to other researchers who want to study Frayer model strategy more intensively in teaching vocabulary.
- 2) Practically

a. For Teachers

By doing this research, the researchers hopes that the output of this study can give contribution to developing English teaching, especially in vocabulary. Also, the researchers hope teachers can use Frayer Model as an alternative method in the teaching and learning process.

b. For Students

When this research is done, The process of this research can be useful for the students to increase and develop their English vocabulary with Frayer Model.

c. For the next researcher

The researcher hopes this research can be developed by the next researcher in different skills and participants.

F. Organization of The Thesis

The organization of the study will be dividing into five chapters as follows:

The first chapter is an introduction that contains the background of the study. It will discuss about general description of problems. The problems related to about vocabulary and the use of Frayer model strategy. The chapter also states the limitation of the study to know the focus the research. Next, the statetement of problem, the objective of

the study, and the significance of the study also the organization of the study.

The second chapter is related to previous research findings. This chapter also related the theoretical background. It describes the theory, definition of vocabulary, teaching vocabulary and Frayer model strategy. Besides, how the steps of using Frayer model strategy, the advantages and disadvantages of Frayer model strategy. Next, theoretical framework. The last about hypothesis.

The third chapter is a related research methodology that contains research design, population, and sample, data collection instruments, validity and reliability, data collection technique, data analysis technique.

The fourth chapter is research findings that explain data description, data analysis, discussion, and interpretations.

The fifth chapter is closing which contains about conclusion and recommendations.



CHAPTER II

PREVIOUS RESEARCH FINDING, THEORETICAL BACKGROUND, THEORETICAL FRAMEWORK, AND HYPOTHESIS

In this part, the research presents and breaks down this chapter into four parts. The first part is related to previous research findings, the second part is related to the theoretical background, the third part is related to the theoretical framework, and the last is related to the hypothesis.

A. Previous Research Findings

There are some researches which have been conducted relating to teaching vocabulary using Frayer model:

The first research was taken from Cikita Rahmadani¹⁷ about *The Effect of Using Frayer Model on The Students' Vocabulary Mastery at SMP IT Al- Ihya Tanjung Gading*. This research aims to know the students' vocabulary mastery that was taught by using Frayer Model, to know the students' vocabulary mastery that was taught by using conventional strategy and to find out whether there was a significant effect on the students' vocabulary mastery at eighth-grade students' of SMP IT Al Ihya Tanjung Gading in 2017/2018 academic year. The research methodology of this research was quantitative research, which conducted the experimental and control class. The population of the

¹⁷Cikita Rahmadani, *The Effect of Using Frayer Model on The Students' Vocabulary Mastery at SMP IT Al- Ihya Tanjung Gading*. Academic year 2017/2018(Thesis)

research was eighth-grade students of SMP IT Al Ihya Tanjung Gading, the number of students was 87 students consist of three classes.

The experimental class (VIII B) was 26 students and the control class (VIII C) was 26 students as a sample with a total were 52 students. The result findings are there was a significant effect of using Frayer Model on the students' vocabulary mastery

The similarity between the previous study and this research is the research used quantitative research with a design quasi-experimental. Meanwhile, the difference between the previous study and this research is the previous study focus object vocabulary in short messages text and notices and this research focus in narrative text.

The second research was taken from Siti Saadah Talla¹⁸ about *Using Frayer Model to Develop Students' Vocabulary Knowledge on The X_B Grade of SMA NEGERI 1 LEIHITU*. This research used Classroom Action Research. This Classroom Action Research was carried out in two cycles whose procedures consisted of planning, acting, evaluating, and reflecting. Data that had been gathered after implementing this model were analyzed through the test, observation checklist, and questionnaire. The gathered data indicates that: (1) the use of Frayer model enables the students to learn unfamiliar words thoroughly; (2) their understanding of words becomes greater; (3) they gradually become more critical.

¹⁸Siti Saadah Talla, *Using Frayer Model to Develop Students' Vocabulary Knowledge on The X_B Grade of SMA NEGERI 1 LEIHITU*. Academic Year 2014/2015. (Thesis)

With these findings, it can be inferred that the Frayer model can develop students' vocabulary knowledge which directly enables them to gain a better achievement, particularly in the test of the second cycle as they succeeded to reach the criteria of success in this research. Additionally, the students also show positive responses towards the use of Frayer model which can be seen from the result of the questionnaire.

Thus, the use of Frayer model has been successfully implemented in developing students' vocabulary knowledge on the X_B grade of SMA Negeri 1 Leihitu.

The similarity between the previous study and this research is the object focus vocabulary. Meanwhile, The difference between previous and this research is the previous study used classroom action research, and this research used quantitative research.

The last research was taken from Tiara Dwi Oktaviani¹⁹ about Using Frayer Model Strategy through Vocabulary in Teaching Students Descriptive Text Writing (A Quasi-Experimental Research at the first Grade of MAN 1 Pandeglang. This research aims to investigate using Frayer model strategy through vocabulary in teaching students' descriptive text writing. This research conducted based on the research questions 1) To know the effectiveness of Frayer model applied in teaching vocabulary on descriptive text writing.? The method used in

¹⁹Tiara Dwi Oktaviani, Using Frayer Model Strategy through Vocabulary in Teaching Stusents Descriptive Text Writing (A Quasi Experimental Research at the first Grade of MAN 1 Pandeglang. Academic Year (2017/2018 (Thesis)

this research is a quasi-experimental method using a t-test. To find out the significant difference in the students' writing between the experimental class and control class through the score of pre-test and post-test. The research conducted in the first grade (X) of MAN 1 Pandeglang, and take students from class X IPA 1 consists of 25 students as the sample of experimental class and X IPA 2 consists of 22 students as the sample of the control class.

Based on the result of the test, it can be concluded that the Frayer model strategy can improve students' writing on the descriptive text and also can be applied in the teaching-learning process, especially in improving students' writing.

The similarity between previous and this research is the research used quantitative research with design quasi-experimental. Meanwhile, the difference between the previous study and this research is the previous study focus object vocabulary in descriptive text. And this research focus object vocabulary in narrative text.



B. Theoretical Background

1. Vocabulary

a. Definition of Vocabulary

Vocabulary can be defined as a center of English language teaching because without adequate vocabulary students cannot understand others or express their ideas.²⁰ It means that students must be mastering many of vocabularies. To communicate well in a foreign language especially the English language, students should acquire an adequate number of words and should know how to use them accurately.

Vocabulary is about the knowledge of words and word meanings. As Steven Stahl said vocabulary is the knowledge of a word not only implies a definition but also implies how that word fits into the sentence.²¹ It means that the word is chosen must be following the sentence.

According to Richard and Renandya in their book, vocabulary is a component of language proficiency that provides much of the basis for how

²⁰Thomas S. C. Farrell, *Teaching Vocabulary*, (USA: TESOL International Association, 2013), 2.

²¹*Ibid*, 3.

students listen, speak, read, and write.²² Without extensive vocabulary and strategies for mastering new vocabulary, students often reach their potential and may lose their courage to take advantage of language learning opportunities around them.

The other definition of vocabulary states from Ur Penny, she said that vocabulary as the words we teach in a foreign language. Also, Hatch and Brown say that vocabulary refers to a list or set of words for a particular language or a list or set of words that individual speakers of language might use.²³ Every speaker has collection words certainly. An individual has a total of words differently. Moreover, a speaker has to know the vocabulary to communicate with other people.

From another statement above, it can be concluded that vocabulary an important role in connecting the four language skills. People, who learn the language, must be mastering their vocabulary. People who have limited vocabulary will have difficulty communicating with others.

²²Jack C. Richards and Willy A. Renandya, *Methodology in Language Teaching* (New York: Cambridge University Press, 2002), 255.

²³Penny, Ur. *A Course in Language Teaching, Practice and Theory*.(Cambridge: Cambridge University Press, 1996),60.

b. The Importance of Vocabulary

Learning vocabulary is very important for people who learn English both as a foreign language and as a second language. John Dewey stated that vocabulary is critically important because a word is an instrument for thinking about the meanings which it expresses.²⁴

The importance of vocabulary in language learning is also illustrated by which states that without grammar, little can be conveyed; without vocabulary, nothing can be conveyed. He further stated that by studying vocabulary a person would be able to improve language skills quickly.²⁵

c. Aspect of Vocabulary

There are nine aspects of vocabulary. These nine aspects fall into three broader areas of form, meaning, and use, and each has a receptive and productive element. Nations stated that the form of a word involves its spoken form (pronunciation), written form (spelling), and any word parts that make up this particular item (such as a prefix, root, and suffix).

²⁴William P. Bintz, Reaching and Teaching All Students. *Journal national Middle School Association Volume No. 42*(NMSA, 2011), 44.

²⁵Thornburry, How to teach vocabulary (England: Person Longman, 2002), 13

According to Nation, meaning encompasses the way that forms and meaning work together, in other words, the concept and what items it refers to, and the associations that come to mind when people think about certain words or expressions Nation mentioned the use that the grammatical functions of the word or phrase, collocations that normally go with it, and finally any constraints on its use, in terms of frequency, level, and so forth. Nation stated for form, meaning, and use, there is both a receptive and productive dimension, so knowing these three aspects for each word or phrase.²⁶

Form	Spoken	R	What does the word sound like?
		P	How is the word pronounced?
	Written	R	What does the word look like?
		P	How is the word written and spelled?
	Word Parts	R	What parts are recognizable in this word?
		P	What word parts are needed to express the meaning?
Meaning	Form and meaning	R	What meaning does this word form signal?
		P	What word form can be used to

²⁶Thomas S. C. Farrell, *Teaching Vocabulary*, (USA: TESOL International Association, 2013), 3.

			express this meaning?
	Concepts and referents	R	What is included in this concept?
		P	What items can the concept refer to?
	Associations	R	What other words does this make us think of?
		P	What other words could we use instead of this one?
Use	Grammatical Functions	R	In what patterns does the word occur?
		P	In what patterns must we use this word?
	Collocations	R	What words or types of words occur with this one?
		P	What words or types of words must we use with this one?
	Constraints on use (Frequency, appropriate)	R	Where, when, and how often would we expect to meet this word?
		P	Where, when, and how often can we use this word?

Table 2.1 Aspects of vocabulary knowledge Note:

R = receptive knowledge; P = productive knowledge

d. Component of Vocabulary

According to Gairns and Redman, there are several components of lexis that need to be taken into account when teaching vocabulary.

1) Polysemy: a single word form with several different but closely related meanings. (e.g. head: of a pin, of a head and organization).

2) Homonymy: a single word form has several different meanings that are not closely related. (e.g. a file: used for keeping papers in or tool for cutting or smoothing hard substances).

3) Synonymy

Another difficulty with meaning arises with groups of words that share a general sense and so maybe interchangeable in a limited number of contexts, but which on closer inspection reveal conceptual differences. (e.g. extend, increase, expand).

4) Antonymy: the sense relation that exists between words that are opposite in meaning. (e.g. male and female).

5) Style, register, and dialect. The used *style* in a very broad sense to include the level of formality (slang, colloquial or informal, neutral, formal, frozen). As well as styles such as humorous, ironic, poetic, literacy, etc.

Register are varieties of the language defined by their topic and context of use; the language of

medicine, education, law, etc. (e.g. 'minor' is the legal term for 'child').

Dialect is used to describe differences in geographical variation (e.g. American English, Scottish English, etc.) as well as a variation according to social class.

(e.g. sidewalk (US)= pavement (GB)).²⁷

e. **Kinds of Vocabulary**

There are two kinds of vocabulary, Receptive and productive vocabulary.

1) Receptive Vocabulary

Receptive vocabulary is words that students recognize and understand when they occur in a context, but which they cannot produce correctly. It means that receptive vocabulary is the set of words for which an individual can assign meanings when listening or reading.

2) Productive Vocabulary

Haycraft states that productive vocabulary is words that students understand, can pronounce correctly,

²⁷Gairns, Ruth and Redman, Stuart. *Working with Words*. (Cambridge: Cambridge University Press, 1986.), 21.

and constructively in speaking and writing.²⁸ It means that productive vocabulary is the set of words an individual can use when writing or speaking.

2. Teaching Vocabulary

According to Karen, teaching vocabulary is a complex process that demands multiple strategies and many opportunities to interact with new vocabulary terms.²⁹

Teaching vocabulary is one of the most parts of teaching English as a foreign language. The teachers should be concerned that teaching vocabulary is something new and different from students' native language.³⁰ They also have to take into account that teaching English for young learners is different from adults. The teachers have to know the characteristics of his/her learners. They moreover need to prepare good strategies and suitable material to gain the target of language teaching.

In teaching vocabulary, teachers can apply a host of strategies and activities. According to Hatch and Brown, teaching strategies refer to everything teachers do or should

²⁸Evelyn Hatch and Cheryl Brown, *Vocabulary, Semantics and Language Education*, (New York : Cambridge University Press, 1995), 370.

²⁹Tankersley, Karen. *The Treads of Reading* (USA:ASCD, 2003), 72.

³⁰Mofareh Alqahtani, The Importance of Vocabulary in Language Learning and How to be taught, *International Journal of Teaching and Education Vol. III, No. 3 / 2015*. 24.

do to help their learners learn.³¹Sometimes the teacher using strategies as media in the teaching process. It helps the teaching-learning process in the classroom be better. Besides, it can help students learning mastery.

3. Vocabulary Assessment

In education the term assessment refers to the wide variety that educators use to evaluate, measure, document the academic readiness, learning progress, and skill acquisition of students throughout their learning in life. According to Palomba, assessment is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development.³²

Vocabulary assessment seems straightforward in the sense that word list are readily available to provide a basis for selecting a set of words to be tested.³³Vocabulary assessment helps teacher to earn information about how much learning vocabulary you have happens in class, and does teaching effective or not. It is important to determine

³¹Visnja Pavii Taka, *Vocabulary Learning Strategies and Foreign Language Acquisition* (Toronto: Multilingual Matters, 2008), 19.

³² Palomba,C. and Banta. *Assessment Essentials : Planning, Implementing, and Improving Assessment in Higher Education* (San Fransisco :Jossey Bass, 1999), 4.

³³ Read, John. *Assessing Vocabulary* (New York : Cambridge University Press, 2000), 2

the reasons of assessing vocabulary to make assessment precise.

This is the rubric for assessing vocabulary. Based on Jacobs et al. as follow³⁴:

Score	Category	
20 -18	Excellent to very good	Sophisticated range – effective word/ idiom choice and usage – word form mastery – appropriate register
17 -14	Good to average	Adequate range – occasional errors of word/ idioms form, choice, usage but meaning not obscured
13 - 10	Fair to poor	Limited range – frequent errors of word/ idioms form, choice, usage – meaning confused or obscured

³⁴Daller, Helmut. Modelling and Assessing Vocabulary Knowledge (New York : Cambridge University Press, 2007), 43

9 - 7	Very poor	Essentially translation – little knowledge of English vocabulary, idioms, word form – not enough to evaluate
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Table 2.2 Rubric for Assessing Vocabulary

4. Frayer Model Strategy

a. Definition of Frayer Model Strategy

In the teaching and learning process, the teacher should prepare and find out the appropriate strategies which will be implemented to the students. A teacher should prepare himself or herself with various and appropriate strategies. According to Arvind in his journal, a strategy is a generalized plan for a lesson which includes structure, desired learner behavior in terms of goals of instruction and outline of planned tactics necessary to implement the strategy.³⁵ It means that strategy to help the teacher handles their classroom in the learning and teaching process. One of the strategies in teaching vocabulary is Frayer Model Strategy.

³⁵ Arvind kr. Teaching Approaches, Methods and Strategy. Scholarly Research Journal for Interdisciplinary Studies Volume No 4 2017, 694

Trisha Brummer states Frayer Model is a strategy in which students use the graphic organizer as a means to clarify their understanding of a concept and to distinguish that concept from others they may know or maybe learning. The framework of the Frayer model includes the domain-specific or academic word, the definition, the characteristics of the concept word, examples of the concept word, and non-examples of the concept word. It is important to include both examples and no examples so that students can clarify what the concept word is, what it is not, and any nuances in word meanings and relationships.³⁶ The use of Frayer model can be applied for teaching all vocabulary. Some aspects of vocabulary such as nouns, verbs, adjectives, are continually used in the Frayer model.

The purpose of Frayer Model strategy is to identify and define unfamiliar concepts and vocabulary. Students define a word/term, describe its essential characteristics, provide examples of the idea, and suggest non-examples of the idea.³⁷

³⁶ Trisha Brummer, Stephanie Macceca, *Reading Strategies for Mathematics* (America : Shell Education Publishing, 2014), 64.

³⁷Frichardsons, *Vocabulary Frayer Strategi*, (National Behaviour Support Service),15

b. Steps in Using Frayer Model Strategy

Explicitly teaching the Frayer Model strategy:

Step 1 Explain the Frayer model strategy chart to the class by using a common word to demonstrate the various components. Model the type and quality of desired answers when giving examples.

Step 2 Then review a pre-selected list of key concept words with the class before reading about the topic in the textbook. Read the text selection.

Step 3 Pass out blank copies of the Frayer Model strategy or have students create a chart in their copies.

Step 4 Then students practice the strategy with the key concepts and key vocabulary from the topic.

Step 5 Students can then add additional words/ images/ symbols to the Frayer chart until all four categories are substantially represented.³⁸

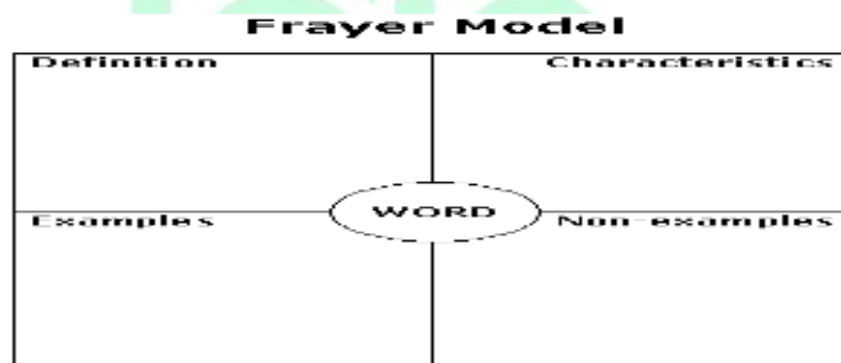


Figure 2.1 Frayer Model

³⁸*Ibid*, 1

c. The Advantages and Disadvantages of Frayer Model Strategy

The Frayer model has several advantages for students in learning process, such as:

- 1) Helps make connections between what students know and what they will learn.
- 2) Can be used before, during, or after reading.
- 3) It improves retention of information.
- 4) Students learn how one concept relates to another concept.
- 5) Draws on students' prior knowledge.
- 6) Creates a visual reference to compare examples.³⁹

This is disadvantages of Frayer model for students as follow:

- 1) The strategy need more time
- 2) More confident student tend to dominate when defining the secret word
- 3) Some students missing the vocabularies because they do not focus just some active students who can focus on his strategy

³⁹Nurul Sa'adah, The Effect of Applying Frayer model on Students' Vocabulary Mastery. *International Conference on Global Education V "Global Education, Common Wealth, and Cultural Diversity*. (Universitas Ekasakti, Padang, 2017)541. (Thesis)

C. Theoretical Framework

In teaching vocabulary, it not only consists of teaching certain words but also intends to equip students with the strategies needed to expand their vocabulary knowledge. The teacher must implement strategies to improve students' vocabulary mastery. One strategy is to use the Frayer model strategy in the teaching-learning process. The Frayer Model Strategy is a graphic organizer used to develop vocabulary. Learning vocabulary is often rote learning, with students only memorizing words. But with the application of a graphic organizer, learning can become more profound and fun for students. The Frayer model strategy helps students to learn the meaning and application of unknown words and concepts. Students can make a list of the definition, characteristics, examples, and non-examples on a chart with four quadrants. This model helps the students to develop a conceptual understanding of new vocabulary or creativity concept. Using a particular graphic organizer helps students to think about this term in a variety of ways. It allows them to visually demonstrate what they categorize based on their new knowledge.

This can also serve as a great tool for review or as a study aid. The atmosphere classroom is more enjoyable and productive for learners. It is also good for revising and pronouncing vocabulary. This strategy can create positive energy to review important vocabulary at

the end of a lesson. Their mind will be a refresh to get the secret words from every moment.

By using Frayer Model in learning vocabulary continuously, the student's memorization of words will be sustained in long term memory. Students' vocabulary achievement will be increased. Therefore, it can be assumed that using Frayer Model will improve students' vocabulary mastery. It will apply by the English teacher in the learning process.

In this research, the researcher uses quantitative research, and the title is The Effectiveness of Frayer Model Strategy in Teaching Vocabulary at tenth-grade student of SMAN 1 Nawangan in the academic year 2019/2020. This research will use Frayer Model Strategy to know and to improve students' vocabulary mastery. After that, the researcher will observe this process to know, is there any significant difference score between students who taught by Frayer Model strategy and without teaching by Frayer Model strategy in tenth-grade student of SMAN 1 Nawangan academic year 2019/2020.

The steps to know this process of observation are: first, the researcher will give a pre-test to the experimental group and a control group. Second, after the researcher sees the result of the pre-test, the researcher teaches experimental class using Frayer Model strategy and controlling class without Frayer Model strategy. Third, the researcher will give a post-test for the experimental and controlling class. The last,

the researcher will see the result and find a significant difference between them.

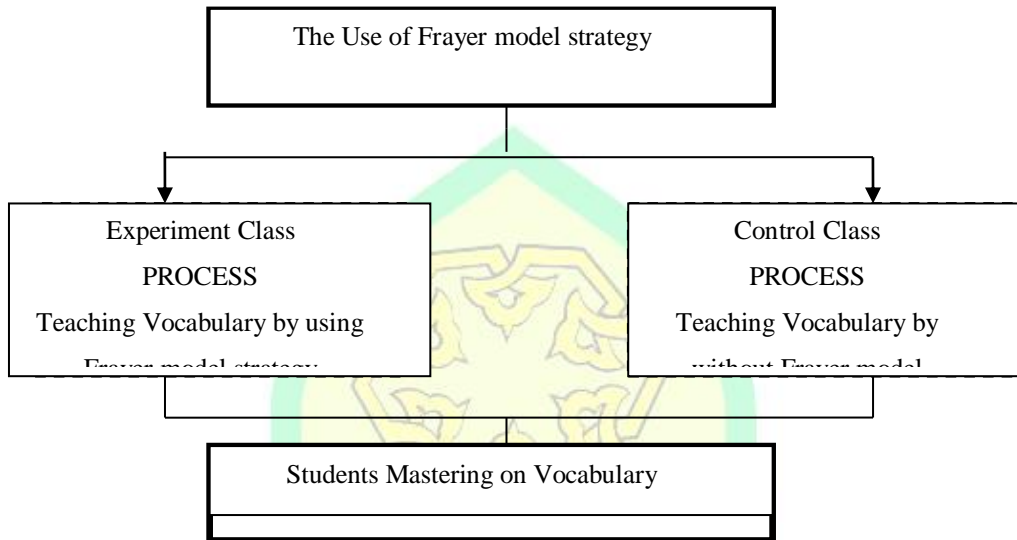


Figure 2.2 Schema Theoretical Framework

D. Hypothesis

The hypothesis is formulated as follows:

Ho = There is no significant difference score between students who were taught by Frayer model strategy and who were not taught by Frayer model strategy

Ha = There is a significant difference score between students who were taught by Frayer model strategy and who were not taught by Frayer model strategy.

CHAPTER III

RESEARCH METHOD

In this chapter, the researcher will discuss the research design, population, and sample, the data collection instrument, validity, and reliability, the data collection technique, the data analysis technique.

A. Research Design

In this research, the researcher applied a quantitative approach. A quantitative approach is an approach for testing objective theories by examining the relationship among variables. These variables can be measured, typically on instruments, so that numbered data can be analyzed using statistical steps.⁴⁰ John Burke states that it is assumed that cognition and behavior are highly predictable and explainable. Traditionally, it means that all events are fully determined by one or more causes, were made in quantitative research.⁴¹ The design of the research was conducted on quasi-experimental research. A quasi-experimental research design is an experimental research design that does not provide for full control of potential confounding variables primarily because it does not randomly assign participants to the

⁴⁰John W. Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, (Boston: Pearson Education, 2002.),

⁴¹Burke Johnson and Larry, *Educational research: Quantitative, Qualitative, and Mixed Approaches*, (USA: SAGE Publications, 2012), 33.

comparison group.⁴² In this research, there were two classes used, they were experiment and control class.

Experiment class was a class that was given treatment by using Frayer Model Strategy and control class was given without Frayer Model strategy.

The research design can be figured as following:

Class	Pre-test	Treatment	Post-test
Experiment	✓	Using Frayer Model Strategy	✓
Control	✓	Conventional Method	✓

Table 3.1 Research Design

There were two variables in this research, independent variable (X) and dependent variable (Y). The Independent variable was Frayer Model strategy and the dependent variable was teaching vocabulary.

This research design used quasi experimental nonequivalent control group design. The design as follow

E	O ₁	X	O ₂
C	O ₃		O ₄

E : Experimental class

C : Control class

O₁ : Pre-test (experimental class)

O₃ : Pre-test (control class)

X : Treatment by using Frayer model strategy

⁴²Ibid, 484

O₂ : Post-test (experimental class)

O₄ : Post-test (control class)⁴³

B. Population and Sample

. A population is a group of individuals, objects, or items from among which samples are taken for measurement.⁴⁴ The population of this research was at tenth grade SMAN 1 Nawangan Pacitan. It was divided into four classes. The total population was 106 students. Meanwhile, the sample is a portion of the population. According to Kultar, the sample can be defined as a finite part of a statistical population whose properties are used to make estimates about the population as a whole.⁴⁵

In this research, the researcher used a cluster random sampling technique. Cluster random sampling involves grouping the population and selecting the groups or the clusters rather than individual elements for inclusion in the sample.⁴⁶ The researcher used this technique because the object study is not based on individuals but based on groups. In this research, the researcher took two classes as a sample. They were class X IPS 1 and class X IPS 2 and total numbers are 58 students. The classes were divided into two groups; they are an

⁴³Sugiyono, *Metode Penelitian Pendidikan*, (Bandung: Alfabeta, 2015), 116

⁴⁴Kultar Singh, *Quantitative Social Research Methods* (New Delhi: Sage Publication, 2007), 88

⁴⁵*Ibid*, 88.

⁴⁶C.R Kothari, *Research Methodology: Methods and Techniques*. (New Delhi: New Age International Publisher, 2004), 16

experimental group and a control group. The class X IPS 1 as an experimental group and class X IPS 2 as a control group.

C. Data Collection Instrument

To collect the data using the instrument. The instrument is a way to get the data. According to Sugiyono, an instrument is a tool that is used to measuring a natural or social phenomenon that observed. Specifically, this entire phenomenon called the research variable⁴⁷The instrument of data collection can show as the table below:

Title	Variable	Indicator	Subject	Technique	Item
The Effectiveness of Using Frayer Model Strategy in	Frayer Model Strategy	1. Use of Frayer Model a. Definition b. Characteristics c. Examples d. Non-Examples	The tenth grade students of SMA	Pre-Test and Post-Test	Multiple Choice Questions: 25 number items (

⁴⁷ Sugiyono, *Metode Penelitian Pendidikan*, (Bandung: Alfabeta, 2015), 148

Teaching Vocabulary at SMAN 1 Nawangan Pacitan.	Teaching Vocabulary	1.Noun 2.Verb 3.Adjective	SMAN 1 Nawangan Pacitan	synonymy, antonym, word in sentence, and similar meaning)
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Table 3.2 Instrument of data collection

In this research, the instrument used to collect data is an English vocabulary test. The vocabulary test given to the students were multiple choices. It is used for pre-test and post-test.

Multiple-choice tests are a way of testing. The multiple-choice format can be used with words in a sentence context, or words in whole texts. Besides, these objective tests to know the students' vocabulary mastery. The test uses five alternatives (a, b, c, d, or e) in each item, and the students are required to choose the correct answer by crossing one of five options provided in the test sheet. The indicators appropriate for tenth-grade students of senior high school. The indicators are verb, noun, adjective word meaning that consists of synonymy, antonym in narrative text.

This is the rubric for assessing in multiple choice test. There are 25 item questions that will be tested. Each answer scored based on scoring requirements.

1. Give 1 point for each correct answer.
2. Give 0 point for each incorrect answer.

Then, the researcher analyzed the data by using the following terms:

1. The following formula is used to score the student's correct answer at the test:

$$\text{Score} = \frac{\text{Students correct answer score}}{\text{The total number of items}} \times 100$$

2. The following categories were used to classify the students score

No	Nama	Score	Category
1			(88 – 100) Very Good
2			(74 – 87) Good
3			(61 – 73) Fair
4			(48 – 60) Poor
5			(> 47) Very Poor

Table 3.3 Categories Students Score

D. Validity and Reliability

Validity and reliability are the two most important psychometric properties to consider in using a test or assessment procedure. Validity refers to the accuracy of the inferences or stability of the test scores.

Meanwhile, reliability refers to the consistency or stability of the test scores.⁴⁸

1. Validity Test

Validity suggests truthfulness and refers to the match between a construct, or the way a researcher conceptualize the idea in a conceptual definition, and a measure. It refers to how well reality fits with actual reality.⁴⁹

In this research, the researcher uses SPSS to measure validity. To find out the validity of the test we can use product-moment correlation by Pearson.

No Items	r count	r table	result
1	0,168	0,404	Invalid
2	0,137	0,404	Invalid
3	0,147	0,404	Invalid
4	0,305	0,404	Invalid
5	0,563	0,404	Valid
6	0,625	0,404	Valid
7	0,511	0,404	Valid
8	0,485	0,404	Valid
9	0,135	0,404	Invalid
10	0,596	0,404	Valid

⁴⁸Burke Johnson and Larry, *Educational research: Quantitative, Qualitative, and Mixed Approaches*, (USA: SAGE Publications, 2012), 172.

⁴⁹ W. Lawrence Neuman, *Basic of Social Research: Qualitative and Quantitative Approach* (Boston: Pearson Education, 2004), 115.

11	0,418	0,404	Valid
12	0,469	0,404	Valid
13	0,471	0,404	Valid
14	0,599	0,404	Valid
15	0,635	0,404	Valid
16	0,572	0,404	Valid
17	0,445	0,404	Valid
18	0,063	0,404	Invalid
19	0,680	0,404	Valid
20	0,434	0,404	Valid
21	0,509	0,404	Valid
22	0,242	0,404	Invalid
23	0,449	0,404	Valid
24	0,468	0,404	Valid
25	0,268	0,404	Invalid
26	0,484	0,404	Valid
27	0,512	0,404	Valid
28	0,219	0,404	Invalid
29	0,680	0,404	Valid
30	0,436	0,404	Valid
31	0,433	0,404	Valid
32	0,551	0,404	Valid
33	0,123	0,404	Invalid
34	0,587	0,404	Valid
35	0,084	0,404	Invalid
36	0,653	0,404	Valid

37	0,445	0,404	Valid
38	0,129	0,404	Invalid
39	0,487	0,404	Valid
40	0,547	0,404	Valid

Table 3.3 Validity Test

Based on the table above, it showed the result of the validity test. To knowing valid or invalid, if the value of r count $>$ than r table was valid and if the value of r count $<$ r table, it was invalid. The value of r table based on table product-moment with significance 5% (0, 05) and $N= 24$ their index is 0,404. There were 12 items invalid (1, 2, 3, 4, 9, 18, 22, 25, 28, 33, 35, 38) and more than it was valid (28 items). From the valid items, the researcher took 25 items that used to pre-test and post-test.

2. Reliability Test

In educational testing, reliability refers to the consistency or stability of a set of test scores. According to Lawrence, reliability means dependability or consistency. It suggests that the same thing is repeated or recurs under identical or very similar conditions.⁵⁰To calculate the reliability test, the researcher used the SPSS program.

Reliability Statistics

⁵⁰*Ibid*, 115

Cronbach's Alpha	N of Items
.738	28

Table 3.3 Reliability Test

Based on the calculation above, the reliability of students 'reliability instrument is 0,738. The value of reliability is consulted r table on the significance level of 5%. The value of the r table is 0,374. Because the value of r index reliability is 0,738 > than r table 0, 374 so the test is reliable.

E. Data Collection Technique

The technique for collecting the data is tested. The test is commonly used in quantitative research to measure the performance of the research participant.⁵¹ According to Brown, Test is a method of measuring of person's ability knowledge or performance in a given domain.⁵²

The data were collected from the test through pretest and post-test. The procedures for collecting data are as follows:

1. Pre-test

⁵¹Burke Johnson and Larry, *Educational research: Quantitative, Qualitative, and Mixed Approaches*, (USA: SAGE Publications, 2012),

⁵² H. Douglas Brown, *Language Assessment* (New York: Longman, 2004), 3-4

The pre-test was given before the teaching-learning activity. The researcher conducted a pre-test both of the control and experiment classes. The test is consists of 25 items of multiple choices. Each item of tests includes an option, namely a, b, c, d, and e. Students choose the correct answer.

2. Post-test

After giving the treatments, a post-test will be given to the students. It aims to know whether the use of Frayer model improves the students' vocabulary mastery or not. The test consisted of 25 items of multiple choices.

Date	Activities
February 20 th , 2020	Pre-test Experiment class Pre-test Control Class
February 27 th , 2020	Treatment Experiment Class Treatment Control Class
March 5 th , 2020	Treatment Experiment Class Treatment Control Class
March 12 th , 2020	Treatment Experiment Class Treatment Control Class
March 19 th , 2020	Treatment Experiment Class Treatment Control Class
March 25 th , 2020	Post-test Experiment Class Post-test Control Class

Table 3.5 Research Schedule

F. Data Analysis Technique

In analyzing the data, the researcher used scores of pre-test and post-test of the experimental and control class. The researcher will compare the score before and after the treatment is given data. Before using the T-test to find the statistical result, the researcher will use the normality test and homogeneity test.

1. Normality Test

The normality test is used to determine whether a data set was well-modeled by normal distribution or not, or to compute how likely the random variable is to be normally distributed. The calculation of the normality test is using SPSS Program. The formula used to test the normality of the data was a Kolmogorov-Smirnov test. Theoretically, if the result of value is greater than 0.05, the data is normal. If it is below 0.05, the data significantly deviate from a normal distribution. The steps find out data as follows:

- a. Open the SPSS application
- b. Input the data to the view by first fill the variable view write down as score of pre-test or post-test and kind of class.
- c. Click Analyze - Nonparametric - Legacy Dialog - One Sample K-S

- d. Drag the variable to the variable list
- e. Checklist Normal - OK

The criteria of determining the normality of the data was:

If the value of significansi > 0.05 , the data distributed normal.

If the value of significansi < 0.05 , the data not distributed normal.

2. Homogeneity Test

Homogeneity means the similarity variance of each group, so the researcher will face with groups that have the same condition room the beginning. The homogeneity test in experimental research is used to know whether experimental and control groups that are taken from the population have the same variant or not.

To calculate the homogeneity of the test, the researcher will use the SPSS program as tools. In this research, the Levene's test is used. It is a formal statistical test for the assumption of homogeneity of variance. The steps find out data as follows:

- a. Open the SPSS application
- b. Input the data to the view by first fill the variable view
write down as score of pre-test or post-test and kind of class

c. Click Analyze- Compare Means – One Way ANOVA

d. Drag the variable X the Dependent list and Y to the Factor list

e. Click Option - checklist Homogeneity of Variance Test – OK

The criteria of determining the normality of the data was:

If the value of significansi > 0.05 , the data distributed homogenous.

If the value of significansi < 0.05 , the data not distributed homogenous.

3. T-test

After testing the normality and homogeneity test, the researcher continues to analyze the data using the t-test. A t-test is used to determine whether the mean of two groups is different from another. In this test, the researcher analyzes the data by comparing the score between the experimental class and control class in the pre-test and post-test. The result of the calculation will show when in teaching vocabulary.

The researcher calculated the data by using a t-test in SPSS V 23 to know the significant difference between students who were taught using Frayer model or who were not. The steps to find out the t-test are as follows:

- a. Open the SPSS application
- b. Input the data to the view by first fill the variable view. change the name, decimals, values and measure.
- c. Click Analyze - Compare Means - Independent-Samples T-test.
- d. Drag the variable X in test variable and Y in grouping variable
- e. Click define groups write down 1 in the group 1 and 2 in the group 2, then click continue – OK

The hypothesis test as follow:

H_a = If the $t_{value} > t_{table}$ or if the sig (2-tailed) < 0.05 , There is a significant difference score between students who were taught by Frayer model strategy and who were not taught by Frayer model strategy. It mean that H_a was accepted and H_o was rejected.

H_o = If the $t_{value} < t_{table}$ or if the sig (2-tailed) > 0.05 , There is no significant difference score between students who were taught by Frayer model strategy and who were not taught by Frayer model strategy. It means that H_o was accepted and H_a was rejected.

CHAPTER IV

RESEARCH FINDINGS

In this chapter, the research related to data description, data analysis, discussion, and interpretation.

A. Data Description

This research used quasi-experimental research. Besides, this research took two classes as a sample. The first class X IPS 1 as an experimental class and second class X IPS 2. The experiment class consists of 29 students and the control class consists of 29 students. Both classes were given different treatments. In an experimental class, the students were taught by using Frayer Model Strategy. Meanwhile, in the control class, the students were taught without using Frayer Model Strategy.

This population that used in this research was tenth-grade students of SMAN 1 Nawangan Pacitan in the academic year 2019/2020. The total number of populations were 106 students. The control class consists of 29 students while the experiment class consists of 29 students. The total numbers of students from two classes were 58 students.

1. The Procedure of The Research in Experimental and Control Class

In conducting this research, the researcher carried out some research procedures of both two-class; experimental and control class. The research was carried out for several meetings. These research procedures are as follows:

The first, before the treatment, was given the researcher gave the students pretest to both of the class to know the condition in each class. The test was given to an experimental and control class. The test consists of 25 multiple choices. Each item of tests includes an option, namely a,b,c, d, and e. Students chose the correct answer.

Second, the researcher gave the treatment to an experimental class using Frayer Model strategy, while the control class was taught using the conventional method. Before taught students in the class, the researcher arranged a lesson plan for teaching guidance, so the researcher has been ready in delivering material in the class. The material was a narrative text. The treatment given is as follows:

Experimental Class (Using Frayer Model Strategy)	Control Class(Applying Conventional Method)
<ul style="list-style-type: none"> • The researcher (teacher) opens the class by greeting the students and explains in brief what they are going to do in the meeting. • Studentspaid attention to the teacher’s explanation and introduction, give comments or questions. • The teacherexplains the Frayer Model to students. • The teacher asks the students to read the text • The students do what the teacher asks to find unfamiliar words and then underline it. Write synonyms and antonym of words. • Studentswith the teacher will select the word from the list and then follow the teachers’ clue. • The teacher and studentsmake the Frayer model chart. They are together to fill in the chart. The students complete Frayer Model chart. 	<ul style="list-style-type: none"> • Researcher (teacher) opens the class by greeting to the students and explains in brief what they are going to do in the meeting. • Studentspaid attention to the teacher’s explanation and introduction, give comments or questions. • The teacherasks the students to read the text. • The teacher asks the students to find unfamiliar words. • The teacherwith the students selects the new words then the students answer the meaning it. • The students translate the new vocabulary by using a dictionary and write a sentence based on vocabulary will be chosen.

Table 4.1 Teacher and Students Activities in The Classroom

Third, this is the second meeting treatment in the experimental class using Frayer model. The teacher-reviewed again the last lesson material. It aims to know students’ vocabulary

mastery using Frayer model. Meanwhile, in the control class the lesson start with reviewed the last material. Next, the teacher asked students to read the text and list unfamiliar words. Thus, the students select the vocabulary and then the students answer the meaning by using a dictionary.

Fourth, the next meeting in the experimental class. The teacher gave the text and asked students to find unfamiliar words. And then made Frayer model with the vocabulary has chosen. In the control class, the teacher asked students to find the vocabulary and then wrote in the sentence.

Fifth, the last meeting treatment in the experimental class using Frayer model. The teacher-reviewed the last lesson again. Then, The teacher asked students to made Frayer model and then fill it. Meanwhile, in the control class, reviewed the last lesson. The teacher asked the students to choose the vocabulary from the text that has done read. Then students wrote the sentence from the vocabulary.

Sixth, The last meeting in the research, both of experiment class and control class were given a post-test. It was aimed to know students 'achievement after giving treatment. The test consists of 25 multiple choices.

2. Students' Vocabulary Test Score in Experimental Class

The data were collected from the result of the students' scores of pre-test and post-test in the experimental class.

NO	NAME	PRE-TEST	POST-TEST
1	ALP	52	80
2	ANDS	52	84
3	AD	72	92
4	AVA	60	84
5	AS	60	88
6	AW	64	92
7	ADP	68	84
8	CNW	56	80
9	DN	56	80
10	DAP	60	96
11	DFA	64	88
12	DZNR	56	80
13	ENS	52	88
14	ERN	68	92
15	EOI	44	76
16	GIA	68	88
17	HNA	48	80
18	HLF	48	88
19	JNA	56	84
20	MRF	80	96
21	MPP	76	92
22	NWZA	64	88

23	RDP	64	80
24	RAP	56	88
25	RA	60	88
26	RP	68	92
27	RFA	56	88
28	TF	56	80
29	TNA	60	88
	Total	1744	2500
	Mean	60.1379	86.2069

Table 4.2 The Result Score of Experimental Class

Based on the table above, it shows the result of pre-test the students who were taught using Frayer model strategy. The data show that the highest score of the pre-test is 80 and the lowest score of the pre-test is 44. The total score of the pre-test is 1744 with the mean score of the pre-test is 60.1379. Meanwhile, the result of the post-test shows that the highest score of the post-test is 96, while the lowest score of the post-test is 76. The total score of the post-test is 2500 with the mean score of the post-test was 86.2069.

3. Students' Vocabulary Test Score in Control Class

NO	NAME	PRE-TEST	POST-TEST
1	ABA	76	80
2	AINS	60	76
3	AMNS	68	80
4	AM	60	88

5	AF	72	76
6	DAP	56	80
7	DAW	64	80
8	EFA	52	76
9	EKP	48	72
10	FK	60	80
11	IWP	48	76
12	LANR	76	88
13	LNA	72	92
14	MAP	80	88
15	MHM	68	72
16	MNJ	64	80
17	PW	56	76
18	RPAC	52	82
19	RR	64	80
20	RAS	64	76
21	RP	60	80
22	RP	56	72
23	SDNK	52	76
24	TS	64	80
25	TD	72	80
26	TS	64	92
27	UNS	80	92
28	VI	64	72
29	YP	56	76
	Total	1828	2318

	Mean	63.0345	79.931
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Table 4.3 The Score of Control Class

Furthermore, the table above the data shows the result of pre-test and post-test the students of the control class. The result of the pre-test showed that the highest score of the pre-test is 80, while the lowest score of the pre-test is 48. The total score of the pre-test is 1828 with the mean score of the pre-test is 63.0345. Meanwhile, the result of the post-test, the data shows that the highest score of the post-test is 92, while the lowest score of the post-test is 72. The total score of the post-test is 2318 with the mean score of the post-test is 79.931.

B. Data Analysis

Before testing the hypothesis, the data must fulfill the assumption in which the data must be distributed normally and homogenous.

1. Normality Test

The researcher did a normality test by using SPSS to see whether or not the distribution of responses to the instrument is normal. The researcher used the Kolmogorov-Smirnov to calculate the normality test. Theoretically, if the result of data is greater than 0.05, the data is a normal distribution.

a. Normality test of pretest Experiment and Control class

One-Sample Kolmogorov-Smirnov Test			
		Pre-Test Experiment	Pre-Test Control
N		29	29
Normal Parameters ^{a,b}	Mean	60.1379	63.0345
	Std. Deviation	8.38248	8.98603
Most Extreme Differences	Absolute	.137	.147
	Positive	.137	.147
	Negative	-.104	-.095
Test Statistic		.137	.147
Asymp. Sig. (2-tailed)		.171 ^c	.111 ^c
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			

Table 4.4 Normality of Pre-Test

Based on the calculation above, it shows that the value of sig. 2 tailed of the pre-test in the experimental class is 0.171 and the control class was 0.111. It can be concluded that the data of this research is normally distributed because the value is greater than 0.05.

b. Normality test of Post-Test Experimental and Control Class

One-Sample Kolmogorov-Smirnov Test			
		Post-test Experiment	Post-test Control
N			

N		29	29
Normal Parameters ^{a,b}	Mean	85.1034	80.5517
	Std. Deviation	6.66732	6.11547
Most Extreme Differences	Absolute	.157	.159
	Positive	.157	.151
	Negative	-.125	-.159
Test Statistic		.157	.159
Asymp. Sig. (2-tailed)		.064 ^c	.058 ^c
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			

Table 4.5 Normality of Post-Test

Based on the calculation above, it showed that the sig. 2 tailed of the post-test in the experimental class was 0,064, and the control class was 0.058. It can be concluded that the data of this research was normality distributed because the result value of data was higher than 0.05.

2. Homogeneity Test

After doing the normality test, the researcher did the homogeneity test that would be using SPSS V 23. The researcher used the Levene statistic test to calculate the homogeneity test the similarity of both classes, experiment class, and control class. if the result of data is greater than 0.05, the data would be homogenous. If it is lower than 0.05, the data significantly deviate from homogeneity.

- a. Homogeneity test of Pretest Experiment and Control class

Test of Homogeneity of Variances			
the result of pre-test experiment and control class			
Levene Statistic	df1	df2	Sig.
.204	1	56	.653

Table 4.6 Homogeneity of Pre-Test

Based on the calculation above, the researcher calculated that the data was homogeneously distributed because the result value of data was higher ($0.653 > 0.05$).

- b. Homogeneity test of post-test Experiment and Control class.

Test of Homogeneity of Variances			
the result of post-test experiment and control class			
Levene Statistic	df1	df2	Sig.
.013	1	56	.909

Table 4.7 Homogeneity of Post-Test

Based on the calculation above, the researcher calculated that the data was homogeneously distributed because the result value of data was higher ($0.909 > 0.05$)

3. T-Test

After testing the normality and homogeneity, the researcher tested the hypothesis. The researcher calculated the data by using a

t-test in SPSS V 23 to know the significant difference between students who were taught using Frayer model or who were not.

Group Statistics					
	class	N	Mean	Std. Deviation	Std. Error Mean
result of the lesson	Experiment	29	86.2069	5.30080	.98433
	Control	29	79.9310	6.01148	1.11630

Table 4.8 Mean Score of Experimental class and Control class Group Statistics

Based on the group statistic above, the data shows that the total of the experimental and control class is 58 students. The mean of experiment class is 86.2069. While the mean of the control class is 79,5862. Thus, it can be concluded that there are differences in the average post-test of students between experiment and control class. Furthermore, to prove whether the difference was significant or not, we need to interpret the following output of the “Independent Sample Test”.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
result of the lesson	Equal variances assumed	.013	.909	4.217	56	.000	6.27586	1.48830	3.29443	9.25729
	Equal variances not assumed			4.217	55.136	.000	6.27586	1.48830	3.29340	9.25833

Table 4.9 The result of T-test Calculation
Independent Sample Test

Based on the result of the table above, it showed that the value of the T-test was 4, 217 and the degree of freedom(df) was 58 (df-2;58-2=56). The value of T in a significant 5% was 2, 003.

To interpret the data above, the researcher formulated the hypothesis below:

H_o = There is no significant difference score between students who were taught by Frayer model strategy and who were not taught by Frayer model strategy

H_a = There is a significant difference score between students who were taught by Frayer model strategy and who were not taught by Frayer model strategy.

The result showed that the value of T-test is higher than the T table. It means that H_o was rejected and H_a was accepted ($4,217 > 2,003$).

C. Discussion and Interpretation

There are many ways of analyzing vocabulary levels and there are many kinds and sources of them. Considering the validity, reliability, normality, homogeneity and t-test of the analyzing tools, many researchers used computer to assess and analyze the vocabulary level with various kinds of analyzing software or tools. One of them used SPSS software. SPSS (Stastical Package for the Social Sciences)

is a software package used for interactive, or batched, statistical analysis.

The data was got through t-test. From the result of a calculation, the researcher founded that $t_o = 4,217$ after that making an interpretation based on the calculation whether there was significant different vocabulary mastery between students who were taught using Frayer model strategy and those who were not taught using Frayer model strategy at the tenth-grade students of SMAN 1 Nawangan in academic year 2019/2020. Based on the calculation above, it was shown that the different coefficient of students who were taught by using Frayer model strategy and students who are not being taught by using Frayer model strategy is 4, 217.

Then the criteria of hypotheses test as follow:

- a) If the $t_o > t_t$ or if the Sig. (2-tailed) < 0.05 . H_a was accepted. It means that there was a significant difference between the two variables.
- b) If the $t_o < t_t$ or if the Sig. (2-tailed) > 0.05 . H_a was refused. It means that there was no significant difference between the two variables.

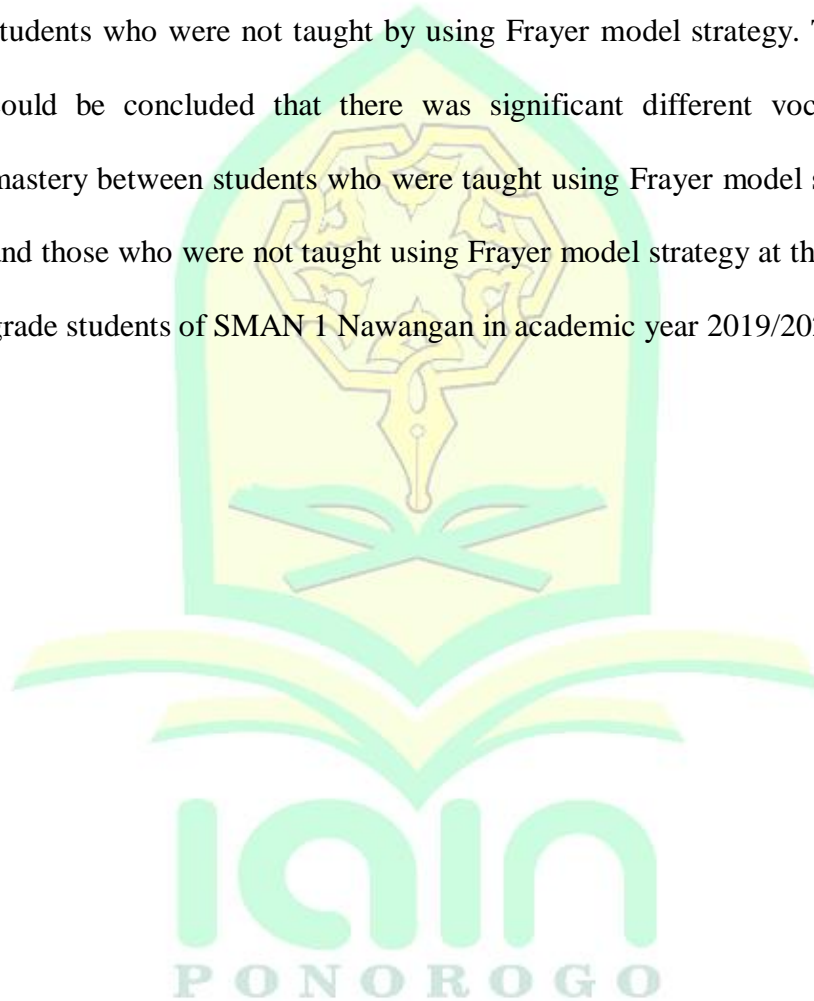
To determine the value of the researcher is checking db and consulted with the t_t score: $Db = n_1 + n_2 - 2$

$$= 29 + 29 - 2$$

$$= 56$$

At the significant standard level of 5%(0,05), the t_t value is 2,003 and the t_o value was 4,217. Thus $t_{\text{value}} > t_{\text{table}}$. It means that H_a was accepted and H_o was refused.

From the calculation above, it could be found that the students who were taught by using Frayer model strategy got a better score than the students who were not taught by using Frayer model strategy. Thus, it could be concluded that there was significant different vocabulary mastery between students who were taught using Frayer model strategy and those who were not taught using Frayer model strategy at the tenth-grade students of SMAN 1 Nawangan in academic year 2019/2020



CHAPTER V

CLOSING

A. Conclusion

Based on the result of the findings and discussion, the researcher concludes that the use of Frayer model strategy has significant effects on students' vocabulary mastery since the score of the students who were taught using Frayer model strategy is better than the students who were not taught using Frayer model strategy. at the tenth-grade students of SMAN 1 Nawangan. From the t-test calculation, it was found that the t_{value} is 4,217 and t_{table} is 2.003 ($t_o > t_t = 4,217 > 2,003$). Therefore, t_{value} is higher than t_{table} . It means that H_a is accepted a H_o is refused.

B. Recommendations

Based on the conclusion above, the researcher gives some recommendations as follows:

1. For the teacher

For the teacher, they should find strategies in teaching English, especially vocabulary to make students can increase vocabulary mastery. The teacher should present or deliver the material in an enjoyable, relaxed, and understandable situation for the students.

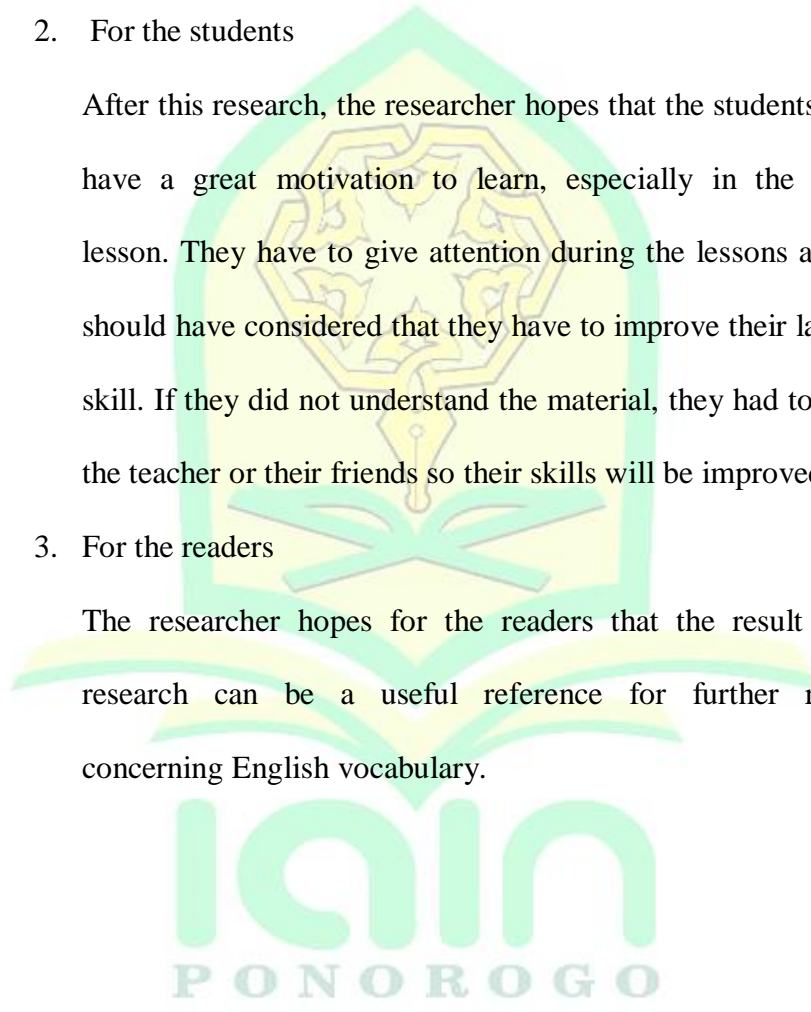
After conducting this research, the researcher suggested applying Frayer Model strategy in teaching English and vocabulary in their class. In the learning process, the teacher should give motivation to their students to make them motivated in learning English.

2. For the students

After this research, the researcher hopes that the students should have a great motivation to learn, especially in the English lesson. They have to give attention during the lessons and they should have considered that they have to improve their language skill. If they did not understand the material, they had to ask for the teacher or their friends so their skills will be improved.

3. For the readers

The researcher hopes for the readers that the result of this research can be a useful reference for further research concerning English vocabulary.



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