"THE EFFECT OF GRAPHIC ORGANIZER: FISHBONE STRATEGIES TOWARDS STUDENTS' READING ABILITY AT THE ELEVENTH GRADE STUDENTS IN PONDOK PESANTREN MTI KOTO TINGGI PANDAI SIKEK"

A Thesis

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CHAPTER 1

INTRODUCTION

A. Background of the Problems

Nowadays, Reading is important. Students, regarding their level, need to understand what they read, since it would improve their other skill. They have to read their compulsory books or other materials related to their lesson. For students who are studying languages, reading is one of the skills, which has to be learned and is considered as the most important one because it can influence other language skill like listening, speaking, and writing

Reading is the foundation of every other skill. Even in Qur'an, the first revealed ayah is to read.

ٱقۡرَأۡ بِٱسۡمِ رَبِّكَ ٱلَّذِي خَلَقَ ١

Meaning: Read! With the name of your lord who created

It is clear that reading is the foundation of every other skill. By reading people can gain more knowledge whether it is listening, speaking, or writing skill.

Reading is not just to read what is written with the loud voice, but rather to understand the content of the text. One of the problems found in learning English is the difficulty of students to understand the text. In teaching and learning English, the teacher usually find students difficulties in reading English text, because they only read the text without understanding it. They are required to understand the contents of reading materials such as;

find out the topic, theme, main idea, and answer the question that related with the text, they are required to have adequate knowledge of language which has different system, including vocabulary and structure.

Unlike the other English skill, reading is more complicated, because reading need much focus to comprehend the meaning of the text. This reason make teaching and learning reading encounter many problem such as misconception of the meaning, become a boring subject to be learned. In addition, reading is a skill to gain information from the written form. According to Morcillon Reading is making meaning from print and from visual information.[1] It means that, without reading people cannot get the information from the visual information.

Furthermore, Morcillon also mentions that reading is an active process that requires a great deal of practice and skill.[2] This fact make reading seems hard to be learned, because without enough skill and practice someone will not be able to master the reading skill. Reading is not enough by only enhancing students' skill but the teachers also have to motivate the student to become an active reader.

In order to do that, the teachers from year to year has used so many strategies to improve the student reading skill, such as making summary strategy, top down strategy, or else. However, none of them that makes a significant impact to the students reading skill. Even though education field

[1]Judi Morcillon, *Collaborative Startegies For Teaching Reading Comprehension* (USA:American Library Association, 2007) p.10

[2] Ibid

encounters this problem, many researchers and educators struggle themselves to find the better strategies.

One of the strategies that have been used lately is learning through graphic organizer. Graphic organizer is offered to solve those problems. Graphic organizers can: help students to recognize the patterns in their reading assignments.[3] The purpose of graphic organizers is to (1) organize, classify, and categorize information, (2) compare and contrast characters, events, or ideas, (3) understand cause and effect (4) recognize and show story sequence and character development. Students or teachers can use them before you begin a lesson to lay the foundation for new ideas. They can help students to recall what they already know about a subject and see how new material is connected to what they already know. Students can use them when they are reading to take notes or to keep track of what they read. Organizers can help students understand and analyze what they read..

In general there are a number of graphic organizer, the first is star, the second is spider, the third is fishbone, the fourth is cloud/cluster, the next is tree, the fifth is chain and events, the sixth is continuum/timeline, the seventh is clock, the following is cycle and events, next is flowchart, the tenth is venn diagram, eleventh is chart/matrix diagram, the next is decision making diagrams, thirteenth is pie charts, the following is vocabulary map, the fifteenth is paragraph structure, the sixteenth is story map, the seventeenth is characters traits, next is biography diagram, the nineteenth is

[3] Margareth Cleveland, *Content – Area Graphic Organizers* (Social Studies, 2004) p.3

animal report, the following is geography report diagram, the last is math diagram. In this case the researcher uses fishbone, it is because of comprehending a descriptive text, and fishbone diagram is suitable for it.

Based on the preliminary observation in Pondok Pesantren MTI Koto Tinggi Pandai Sikek on 20th February 2020, the researcher did the observation two times in different classes in 11th grade which are 11 IPS 1 and 11 Agama 2. From preliminary observation, researcher found several problems. First, most of the students did not understand the meaning of the text they read. This problem was found during observation, the students seems to be nervous and was not know what to answer when the teacher asked the question related to the text. This problem was also found during the observation with the teacher, the researcher found some of the students were not able to comprehend the text by themselves, students need teacher to elaborate it for them, or students need to read it several times and open dictionary to understand it. This is clear that the students understanding in reading is low.

Second problem is the strategy that teacher used. The teacher used conventional strategy which only focus on how teacher delivering the material. For example, the teacher asked each student to read one or half paragraph out loud, and then the teacher would ask the students to answer the questions that are related with the text. This made the students tend to be bored and sleepy in the classroom. The researcher assumes that using a fun strategy like graphic organizer might solve this problem.

Third, the researcher found many students are not interested and have low motivation to read a long text. This was happened because the students have limited vocabulary. For example, when they were provided with a text that at least one page long, they will immediately whining about it. Some of the students did not even know the meaning of the title.

Last, by using fishbone strategy, students find it easier to find the essence of reading such as the main idea or supporting detail in the form of a diagram like a fishbone.

Considering the problem above, researcher assumes that using Fishbone Graphic Organizer would help the students to improve their understanding toward what they read. Based on that, the rsearcher want to find out the effect of using Fishbone Graphic Organizer in students reading, especially their comprehension. This research is entitled "**THE EFFECT OF GRAPHIC ORGANIZER: FISHBONE STRATEGIES TOWARDS STUDENTS' READING ABILITY AT THE ELEVENTH GRADE STUDENTS IN PONDOK PESANTREN MTI KOTO TINGGI PANDAI SIKEK".**

B. Identification of the Problem

Based on the problem that is written in the background of the study above, the researcher formulates the problem in this research as follows:

1. Some students did not have any interest to the reading material that the teacher gives.

2. The strategy that the teacher used does not seem to improve the students motivation in reading.
3. Students were not interested to read a long text.

C. Limitation of the Problem

Based on the identification of the problem above, the researcher limit the scope of the research to only focus finding out the effect of graphic organizer especially fishbone type toward the students' reading ability at the 11th grade in Pondok Pesantren MTI Koto Tinggi Pandai Sikek.

D. Research Questions

Based on the problem above, researcher formulates the question into:

1. Is there a significant effect of using Graphic organizer towards students' reading comprehension at 11th grade of MA Pondok Pesantren MTI Koto Tinggi Pandai Sikek?
2. Is there a significant difference of students who are taught by Graphic organizer and students who are not taught by Graphic organizer?
3. Is students' reading comprehension taught by Graphic organizer better than students who are not taught by it?

E. Purpose of the Research

By considering the research questions identified above, the purposes of this research are :

1. To find out whether there is significant effect of using Graphic organizer towards students' reading comprehension at 11th grade of MA Pondok Pesantren MTI Koto Tinggi Pandai Sikek?
2. To find out whether there is a significant difference of students who are taught by Graphic organizer and students who are not taught by Graphic organizer?
3. To find out whether students' reading comprehension taught by Graphic organizer better than students who are not taught by it?

F. Significance of The Research

This study is expected to be useful for:

1. The Students

   The students know how to improve their reading ability. So they never get difficulty to find the content of reading material such as main idea and sub idea.

2. The English Teacher

   This research result is expected can improve the English teacher's knowledge on the use of various strategies in teaching English, especially reading comprehension through graphic organizer.

3. The Future Researcher

   This research result is expected facilitates the future researcher to be a reference in conducting further studies by using graphic organizer technique on other language skills or language components.

G. Definition of Key Term

The key terms used in this research are defined as follows :

1. Reading ability

   Reading is an activity to gain information from written text. In this research, reading activity will be done through Fishbone strategy.

2. Graphic organizer

   Graphic Organizer is a strategy to recognize patterns and main ideas in reading, understand the relationships between key ideas, organize information and take notes.

3. Fishbone

   It is one of the types in the graphic organizer strategy which the mind mapping is look a like fishbone

CHAPTER II

REVIEW TO THE RELATED LITERATURE

A. Review of the Related Theories

1. The Nature of Reading

a. Definition of Reading

There are the ability to understand and gain meaning from what has been read and being able to communicate this information to others. It is reason for reading. There are definition of reading that support the important of reading.

Reading is an active process which consists of recognition and comprehension skill. Reading is an important activity in life with which one can update his or her knowledge.[4] This skill is more important than speaking and writing and source of joys. Good reading is that which keeps students regular in reading which provide him both pleasure and profit. Reading is very important for students to get knowledge. Therefore the learner of English must know reading English. The education of child is imperfect, unless he is supplied every things needed with the ability of reading.

Reading is the most important activity in any language class. Reading is not only a source of information and a pleasurable

[4] M.F. Patel and M Jain, *English Language Teaching* (Methods, Tools, & Techniques, 2008) p.113-114

activity but also as a means of consolidating and extending one's knowledge of the language. Reading is very necessary to widen the mind and gain and understanding of the foreign culture. Reading is certainly an important activity for expanding knowledge of a language.

Reading is a fluent process of readers combining information from a text and their own background knowledge to build meaning.[5] The goal of reading is comprehension. Strategic reading is defined as the ability of the reader to use a wide variety of reading strategies to accomplish a purpose for reading. Good readers know what to do when they encounter difficulties. Fluent reading is defined as they ability to read at an appropriate rate with adequate comprehension. Meaning does not rest in the reader not does it rest in the text. The readers background knowledge integrates with the text to create the meaning. The text, the reader, fluency, and strategies combined together define the act of reading.

So, reading is the ability in understanding the analitical exposition text by using fishbone strategy which one students might be able to take handle the text and easily could take the main information of the text.

[5] David Nunan, *Language Teaching Methodology,* (A textbook for Teacher, 2007) p.70

b. Background to the teaching of reading

Reading is essential skill for learners of English as a second language. For most of these learners it is the most important skill to master in order to ensure success or not only in learning English, but also learning in any content class where reading in English is required. With strengthened reading skills, learners will make greater progress and development in all other areas of learning, Reading skill is very important to ensure success the students in learning.[6] It means that reading skill can be called the foundation and the most important skill in learning language because its help other skill to be improved.

c. Types of reading

There are many types of reading. According Patel and Jain, types of reading are Intensive Reading, Extensive Reading, Aloud Reading, and Silent Reading.[7]

1) Intensive reading

Intensive reading is related to further progress in language learning under the teacher's guidance. Intensive reading will provide a basis for explaining difficulties of structure and for extending knowledge of vocabulary and idioms. It will also provide material for developing greater control of the language in

[6] Ibid

[7] M.F. Patel and M Jain, *English Language Teaching* (Methods, Tools, & Techniques, 2008) p.117-122

speech and writing. The researcher concludeds intensive reading is reading with teacher's guidance.

2) Extensive reading

Material for extensive reading will be selected at a lower level of difficulty than that for extensive reading. The purpose of extensive reading will be to train the students to read directly and fluently in the target language for enjoyment, without the aid of the teacher. Extensive reading can be made the basis for oral reports, to the rest of the class, or full class discussion. The researcher concludes extensive reading is reading without teacher's guidance.

3) Aloud reading

Reading aloud is important role in teaching of English. Teacher should know that the training of reading aloud must be given at primary level because it is the best of words pronunciation. If it is not cared, it will be very difficult at secondary level. Reading aloud is not useful at the secondary level. The researcher concludes aloud reading is reading with loud sound to clarify pronounciation student.

4) Silent reading

Silent reading is very important skill in teaching of English. This reading should be employed to increase reading

ability among learners. Silent reading is done to acquire a lot of information. Teacher has to make them read silently as and when they are able to read without any difficulties. It is kind of habit in which learner are enabled to read without any audible whisper.

As the conclusion, there are 4 types in reading, they are intensve, extensive, reading aloud, and silence reading. Intensive reaeding is reading under the pressure of the teacher. Extensive reading is reading with large quantity without for pleasure. Reading aloud is reading to improve pronunciation since the students are asked to read aloud. The last one is silent reading where the students are reading without any sound.

d. Principles for teaching reading

In teaching reading teacher as a provider of knowledge has to know about principle of teaching reading before teach the students. Nunan says that there are principles for teaching reading. They are[8]:

1) Exploit the reader's background knowledge.

Background knowledge includes all of the experiences that a reader brings to a text such as life experiences, educational experiences, knowledge of how texts can be organized rhetorically, knowledge of how one's first language

[8] Nunan David, *Practical English Language Teaching*..., p. 74-77

works, knowledge of how the second works, and cultural background and knowledge.

2) **Build a strong vocabulary base**

Recent research emphasized the importance of vocabulary to successful reading.

3) **Teach for comprehension**

In reading instruction programs, more emphasis and time may be placed on testing reading comprehension than on teaching readers how to comprehend. Monitoring comprehension is essential to successful reading.

4) **Work on increasing reading rate**

One great difficulty in the second language reading classroom is that even when language learners can read, much of their reading is not fluent.

5) **Teach reading strategies**

Students need to learn how to use a range of reading strategies that match their purposes for reading. Teaching them how to do this should be a prime consideration in the reading classroom.

6) **Encourage readers to transform strategies into skills**

Strategies can be defined as conscious actions that learners take to achieve desired goals or objectives, while a skill is a strategy that has become automatic.

7) Build assessment and evaluation into your teaching

Assessing growth and development in reading skills from both a formal and an informal perspective requires time and training. Both quantitative and qualitative assessment activities should be including in the reading comprehension.

8) Strive for continuous improvement as a reading teacher

The quality of the individual teacher is integral to success of second/foreign language readers.

It can be concluded that by these principles teacher can decide which principle can be used in the classroom to the students towards the material which discussed at that time. By these principle teacher not only can enrich students reading skill to comprehend the text and get the important information of the text, but also increase students' ability in mastery reading.

e. Assesment

Sainsbury et al make six conclusion of how to asses reading, as follows:[9]

1) Contextualize the reading test

It is not difficult to create simple contexts for reading tasks. Usually they will involve reading in order to do some other task – reading in order to write, or reading in order to discuss, for

[9] Marian Sainsbury & Collin Harrison. *Assesing Reading :From theories to classrom*. p. 38-49

example. Context is an essential part of real world reading and is the easiest way to convey to students the precise purpose for which they are being asked to read the text. Remember that a test may cause or increase stress for students and it is unwise to risk overloading them with instructions.

2) Give the reading task a purpose

The most fundamental problem is that the construction of meaning from a text is a personal, idiosyncratic process and there is often no single meaning which is better than any other. However, we can reduce this problem to a manageable level by constraining cognitive psychology and comprehension through purpose. If it is clear that the reading is meant to achieve a certain purpose and that the student is expected to show that they can achieve it, then theywill at least know the rules of the game. Of course, we cannot guarantee that all of them will be motivated enough to play the game to the best of their ability.

3) Remove the text

Some kinds of reading properly require detailed and repeated reading of the text. For other kinds of reading, however, if we leave the text in place and then ask questions that refer to particular parts of it, it is a near certainty that the students will answer by referring to the text and not by referring to their mental representations. In the worst cases the result will involve nothing

but a simple matching of words in the question to words in the text that tells us little of real value about the student's understanding.

4) Ask the students to summarize the text

Ensure that the task they are asked to carry out as a result of the reading is to summarize the text in a way that is appropriate to the given purpose. Once you have expressed a purpose to the students it would be dishonest to ask them questions that are not related to that purpose. Thus, for instance, it will usually be inappropriate to use a reading task as an opportunity to test the students' knowledge of vocabulary or of details of syntax. If the text expresses a point of view and the purpose is to evaluate the argument, the questions should amount to a critical summary of the logic and its assumptions and the test should not dwell on aspects of style.

5) Minimize the questions

Remember that questions will change the student's mental representation of meaning. Asking for a summary is one, albeit cognitively demanding, way of avoiding this problem entirely and it may be that you can devise, in a contextualized test, a form of response that is so natural that it has little or no backwards influence on the process of comprehension. Students might be asked to write notes for a discussion, or to chart or tabulate the

information they need for their purpose. Any questions that do not relate to the student's perceived purpose for reading will necessarily interfere with our desire to 'see' the mental model they have built.

6) Give the students room to tell you what the text means for them

Remember that many different meaning structures can be defended as interpretations of a single text. If possible, give the students an opportunity to tell you what they remember most, what struck them as most interesting, in the text – even if their answers are not to be scored in the usual way. We are encouraged to include a few questions of this open kind in a survey questionnaire, to show that we respect the respondents' right to hold personal and unpredictable opinions, so perhaps we should adopt a similar approach in reading tests. After all, the students are human beings too.

2. Graphic Organizer

a. Introduction

One way to help make a curriculum more supportive of students and teachers is to incorporate graphic organizers. Graphic organizers come in many varieties and have been widely researched

for their effectiveness in improving learning outcomes for various students.[10]

b. Definition

A graphic organizer is a visual and graphic display that depicts the relationships between facts, terms, and or ideas within a learning task. Graphic organizers are also sometimes referred to as knowledge maps, concept maps, story maps, cognitive organizers, advance organizers, or concept diagrams.

Cleveland adds more about the use of graphic organizers that gives more emphasis on reading.[11]

> Graphic organizers are great tools when you are reading-they can help you through a poem, a story, a biography or international article. Organizer help you analyze what you are reading. You can use them to recognize patterns in your reading, such as identifying the main idea of a story or an article, and finding details that support the main idea. They can help you to compare and contrast things within a story or between two stories. They can even be useful after you read. You can use them to organize your notes and figure out the most important point.

One way to help make a curriculum more supportive of students and teachers is to incorporate graphic organizers. Graphic organizers come in many varieties and have been widely researched for their effectiveness in improving learning outcomes for various

[10] Hall and Strangman, *Graphic Organizers,* (2002), Page 1
[11] Margareth Cleveland, *Content – Area Graphic Organizers* (Social Studies, 2004) p.3

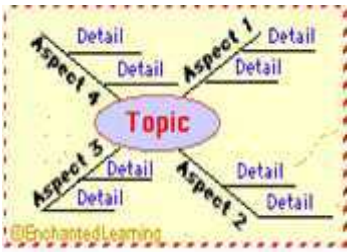
students. The following five sections present a definition of graphic organizers, a sampling of different types and their applications, a discussion of the research evidence for their effectiveness, useful Web resources, and a list of referenced research articles. We have focused this overview on applications of graphic organizers to reading instruction, with the intention of later expanding the discussion into other subject areas.

c. Kind of Graphic Organizers

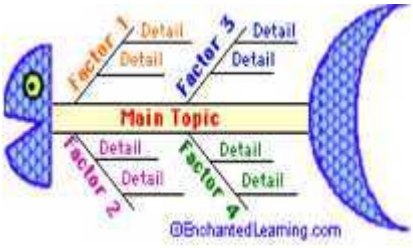
Graphic organizer comes in many different forms, each one best suited to organizing a particular type of information. The following examples are merely a sampling of different types and uses of graphic organizers.



1. Star, if the topic involves investigating attributes associated with a single topic, use a star diagram as your graphic organizer. Example: Finding methods that help your study skills (like taking notes, reading, doing homework, memorizing, etc.).



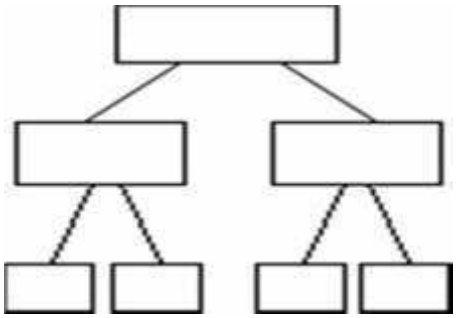
2. Spider: if the topic involves investigating attributes associated with a single topic, and then obtaining more details on each of these ideas, use a spider diagram as your graphic organizer. This is like the star graphic organizer with one more level of detail. Example: Finding methods that help your study skills (like taking notes, reading, memorizing, etc.), and investigating the factors involved in performing each of the methods.



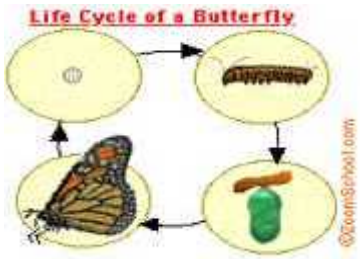
3. Fishbone: If the topic involves investigating multiple cause-and-effect factors associated with a complex topic and how they inter-relate, use a fishbone diagram as your graphic organizer. Example: Examining the effects of improved farming methods.



4. Cloud/Cluster: If the topic involves generating a web of ideas based on a stimulus topic, use a clustering diagram as your graphic organizer. Example: brainstorming.



5. Tree: If the topic involves a chain of events with a beginning and with multiple outcomes at each node (like a family tree), use a tree as your graphic organizer. Example: Displaying the probabilistic results of tossing coins.



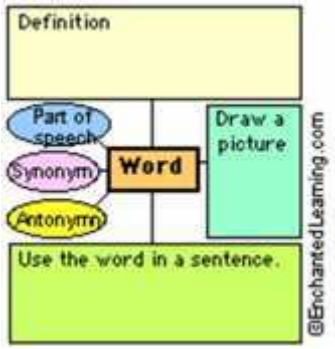
6. Cycle of Events: If the topic involves a recurring cycle of events, with no beginning and no end, use a cyclic graphic organizer. Example topic: Documenting the stages in the lifecycle of an animal.



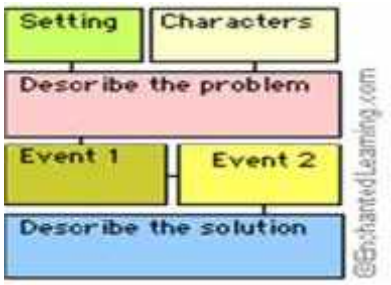
7. Venn diagram: If the task involves examining the similarities and differences between two or three items, use a Venn diagram. Example: Examining the similarities and differences between fish and whales, or comparing a book and the accompanying movie.



8. Pie Charts: If the task involves showing divisions with a group, use a pie chart. Example: Draw a pie chart to show what percentages of a population have blue eyes, green eyes, or brown eyes.



9. Vocabulary Map: Graphic organizers can be useful in helping a student learn new vocabulary words, having them list the word, its part of speech (noun, verb, adjective, adverb, etc.), a synonym, an antonym, a drawing that represents the word, and a sentence using the word.



10. Story Map: Story maps can help a student summarize, analyze and understand a story or event.

d. Procedure of Graphic Organizers

This is steps for developing the graphic organizer:[12]

1. Analyze the vocabulary of the learning tasks, and list all the words that you feel are important for the students to understand.

[12] Hall and Strangman, *Graphic Organizers,* (2002), Page 5

2. Arrange the list of words until you have a scheme that shows the interrelationships among the concepts particular to the learning task.

3. Add the scheme vocabulary terms that you believe the students understand in order to show relationship between the learning task and the discipline as a whole.

4. Evaluate the organizer. Have you clearly shown major relationship?

   Can the organizer be simplified and still effectively communicate the idea you consider crucial?

5. Introduce the students to the learning tasks by showing them scheme, encourage them to contribute as much information as possible to the discussion of the organizer.

6. As you complete the learning task, relate new information to the organizer where it seems appropriate.

3. Fishbone

Students can use a Fishbone Map both during and after reading. This kind of graphic organizer allows them to structure ideas on a topic and make multifaceted information more manageable. It provides readers with a framework for recognizing the main idea and supporting details. This kind of map can be used to analyze a

complex event, but it is flexible and can be adapted to suit the level of complexity of any text students are reading.[13]

Fishbone Diagram the purpose of a fishbone diagram is very similar to that of a main idea/supporting details chart. A main idea statement or category is written on the single line to the left. Supporting facts, examples, or subcategories are written on the lines to the right. In many cases, a third set of lines can be generated and attached to the subcategories with additional information or facts. Fishbone diagram are kind of graphic organizer for recognizing idea and supporting details.[14]

a. Purpose

The purpose the fishbone organizer help students recognize that nonfiction articles and expository writing contain a main idea and supporting details. As they isolate specific information to record on the organizer, students make decision regarding its relevance, there is by increasing their understanding that not all text is of equal importance. Students who are writing essays or articles can use the graphic during prewriting to ensure that their work contains a main idea and to help them develop a structure for their piece.

[13] William Golding, *Down to the Bones: Fishbone Map* (2009) p 22
[14] Theodore T Allen, *Introduction to Engineering Statistics and Lean Sigma* (2005 Second Edition), Chapter 5

b. How to use the fishbone

After reading an article, have students determine the main idea and write it on the spine of the fish. Then encourage to write the details that support the main idea inside the divisions made by the other bones. Students who wish to use the graphic organizer to plan their own writing can begin with the main idea or record fact first, which may lead them to the development of a main idea.[15]

There are many kinds of graphic organizers can be used in text comprehension. To comprehend a descriptive text, the suitable graphic organizer is fishbone diagrams. Fishbone map helps student to build the reading comprehension through organizing main ideas and supporting detail. Descriptive text is a text which lists the characteristic of something. In descriptive text the writer provide detail information about something, by using fishbone the supporting detail can be shown easily.

A fishbone map (sometimes called a herringbone map) is a type of graphic organizer that is used to explore the many aspects or effects of a complex topic, helping the student to organize their thoughts in a simple, visual way. The use of color helps make a fishbone map clearer and easier to interpret.

[15] Kaoru Ishikawa, *Introduction to Quality Control,* p 152



If the topic at hand involves investigating attributes associated with a single, complex topic, and then obtaining more details on each of these ideas, use a fishbone diagram as your graphic organizer. The fishbone diagram is like a spider map, but it works for more complex topics - topics that require more details to be enumerated. The process of creating fishbone diagram helps the student focus on the topic, requires the student to review what they already know in order to organize that knowledge, and helps the student to monitor their growing comprehension of the topic. It also helps point out the areas where the student must investigate more.

B. Review Related Studies

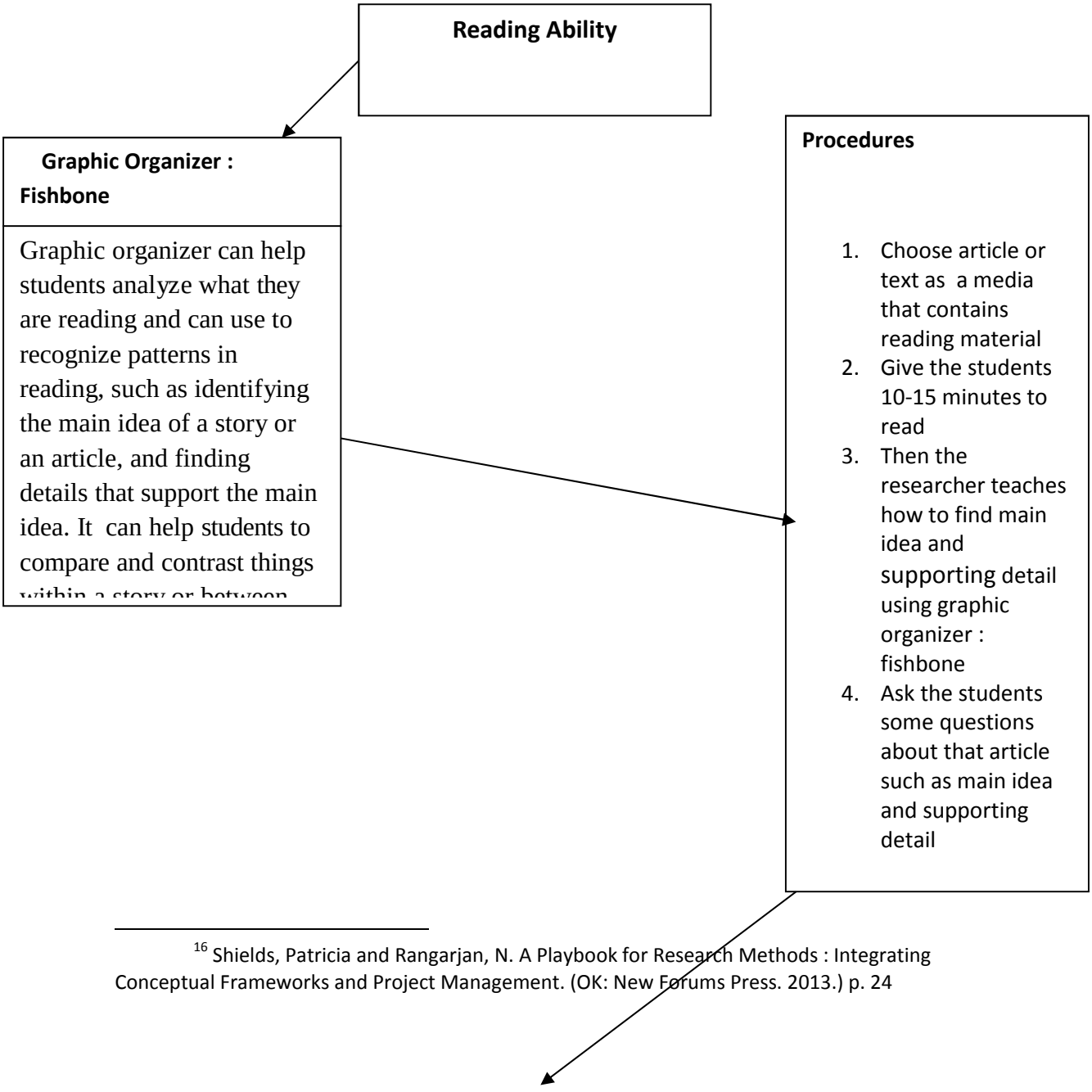
There are many researches discuss about graphic organizer. First, the research was conducted by Suhaidi Pratama in 2007 entitled "Graphic Organizer as One Alternative Technique to Teach Writing" in his research try to find the students competence in writing. This research is conducted based on the preliminary research that are many students considered writing is difficult. The objective of the research was to find out whether there is influence of graphic organizer towards students' writing ability in descriptive text. The methodology of this research was quasi experimental design with the treatment held in 3 meetings. In collecting the data, the writers used instruments pre-test and post-test. The instrument was descriptive writing test. After giving the post-test, the writers analyzed the data by using independent sample t-test. From the data analysis, it was found that the result of test was to observed (2.76) with critical (1.684), it means that the score of to observed was higher than critical, so Ha is accepted. So, there was influence of graphic organizer towards students' writing ability in descriptive text.

The second research was conducted by Abdul Ayiz in 2018 entitled "The Effectiveness of Graphic Organizers and Gist Strategies on Students with Different Reading Habits in Reading Comprehension" in his research try to find the students competence in reading project. This study is an experimental research with a

factorial design addressed to investigate the effectiveness of graphic organizers and GIST strategy to enhance reading comprehension of students with good and poor reading habits. The samples of this study were the twelfth graders of MA Sholahuddin Demak in the academic year of 2016/2017. There were two classes that became the samples of the study. Graphic organizers strategy was used in the first experimental group, and GIST strategy was used in the second experimental group. To answer research questions number one up to four, T-test was used; meanwhile, two-ways ANOVA with F-test at the 5% (0.05) level of significance was used to answer the fifth up to seventh question. The result of this study showed that graphic organizers and GIST strategy were effective to enhance reading comprehension of students with good and poor reading habits. In addition, there is no significant difference of the use of graphic organizers and GIST strategies to enhance reading comprehension for students with good and poor reading habits. In addition, there is no significant difference of reading habits in using graphic organizers and GIST strategies to enhance reading comprehension. At last, there is no interaction among graphic organizers, and GIST strategies, reading comprehension, and reading habits.

C. Conceptual Framework

Conceptual Frameworks are abstract representation, connected to the research project's goal that directs the collection and analysis of data. Patricia and Rangarjan said that Conceptual framework as the way ideas are organized to achieve a research project's purpose.[16] So, researcher chooses mapping as conceptual framework to organize the idea of research.



[16] Shields, Patricia and Rangarjan, N. A Playbook for Research Methods : Integrating Conceptual Frameworks and Project Management. (OK: New Forums Press. 2013.) p. 24

1. Is there a significant effect of using Graphic organizer towards students' reading comprehension at 11th grade of MA Pondok Pesantren MTI Koto Tinggi Pandai Sikek?
2. Is there a significant difference of students who are taught by Graphic organizer and students who are not taught by Graphic organizer?
3. Is students' reading comprehension taught by Graphic organizer better than students who are not taught by it?

D. Hypothesis

A working hypothesis is a provisionally accepted hypothesis proposed for further research.[17] According to this fact, the hypothesis of this research formulated as follow :

1. Ha : there is a significant effect of using graphic organizers : fish bone toward students' reading ability.

   H0 : there is no significant effect of using graphic organizers : fish bone toward students' reading ability.
2. Ha : there is a significant difference of students who are taught by using graphic organizers : fish bone toward students' reading ability.

   H0 : there is no significant difference of students who are taught by using graphic organizers : fish bone toward students' reading ability.
3. Ha : Students's reading ability taught by using graphic organizers : fish bone toward students' reading ability is better than students who are not taught by it.

H0 : Students's reading ability taught by using graphic organizers : fish bone toward students' reading ability is not better than students who are not taught by it.

[17] Ray Hilborn & Mangel,. *The ecological detective : confronnting models with data.* (Princeton University Press. 1997) p. 24

CHAPTER III

RESEARH METHOD

A. Design of the Research

The researcher will use the quantitative research. The quantitative research is a kind of research that collects the data in the form of number. According to Sugiono, a research is called as quantitative because of the data of the research is use numeric and using statistical analysis.[18] There are many types of quantitative research; they are survey research, correlational research, causal-comparative research and experimental research.

The design of this research is experimental research because it has the purpose to know the effect of using graphic organizer in teaching reading. Gay states in Emzirs' that experimental research is the one of research method that can truly test the hypothesis concerning cause and effect relationship.[19]There are two major classes of experimental designs, single-variable designs, which involve one independent variable, and factorial designs, which involve two or more independent variables. Factorial designs are classified as pre-experimental, true experimental and quasi experimental. In this case, the researcher will choose the quasi Experimental Design because in this design, the researcher can control some variables which influence the process of the experimental. According to Suryabrata, quasi experimental design divided into two kinds, Posttest-Only Control Design

[18]Sugiono, *Metode Penelitian Pendidikan (Pendekatan, Kuantitatif, Kualitatif, dan R&D)*, (Bandung: Alfabete, 2009). P. 13

[19]Emzir, *Metodologi penelitian pendidikan: kuantitatif dan kualitatif*, *(*Jakarta:RajawaliPers, 2012). P. 63

and Pretest- Posttest Control Design. Posttest- Only Control Design is a type of true experimental design where test units are randomly allocated to an experimental group and a control group. The experimental group is exposed to a treatment and both groups are measured afterwards. Both groups are measured before and after the experimental group is exposed to a treatment.[20].

However in this research, researcher chooses the Pretest Posttest Control Design, which in this design there are two groups in this research. Experimental group is treated by using graphic organizer and the control group which is treated without using graphic organizer between pretest and postttest. Related to experimental and control, Gay states," The experimental group usually gets new treatment or treatment under investigation, while the control group gets different treatment or treated like usual".[21]The control group is needed to know whether the new treatment under investigation is more effective than the use the unusual one. These two groups will be given the same length of the time and the same materials in teaching. This research will use the pretest to determine a student's baseline knowledge or preparedness for an educational experience or course of study and posttest to know whether there will be differences of the students' reading understanding.

[20]Suryadi Suryabrata.*PsikologiPendidikan*. (Jakarta: PT Rajawali.. 1990), p,32-36

[21] L. R. Gay, *Educational Research*, (Republic of Singapore: Merrill Publishing Company, 1990), p.261

Table1. The design of the research

Class	Pretest	Treatment	Posttest
Experimental class	T1C	X	T2C
Control class	T2D	-	T2D

Where:

T1C = The pretest for experimental class

T2D = The pretest for the control class

X = The treatment that is given to the experimental group by using graphic organizer

T2C = The posttest for the experimental class

T2D = the posttest for control class

Based on the research design above, special treatment is only given to the experimental class. The post-test will be administrated after the implementation of graphic organizer as the special treatment for the students in the experimental class. It will be given in order to observe students' reading ability in both classes.

B. Population and Sample

1. Population

Population and sample are two important elements in doing a research. Margono states that the population is the whole data which

become our focus in the certain place and time.[22] The population is all students at the eleventh grade of Pondok Pesantren MTI Koto Tinggi Pandai Sikek.

Table 2. The population of eleventh grade

No	Class	Students totality
1	XI.IPA 1	27
2	XI IPA 2	28
3	XI IPS 1	28
4	XI IPS 2	26
5	XI AGAMA 1	27
6	XI AGAMA 2	28
7	XI AGAMA 3	27
	Total	191

Source: English teacher of Pondok Pesantren MTI Koto Tinggi Pandai Sikek

From this table, the population from this research is 191 students that are the total of the students in the 11th grade in Pondok Pesantren MTI Koto Tinggi Pandai Sikek 2019-2020

2. Sample

The sample of this research will be determined by using purposive sampling. According to Margono, the purposive sampling is the selection of a group based on certain characteristic are deemed have a

[22]Margono.*Metodolog iPenelitian Pendidikan*.(Jakarta:PT. Rineka Cipta.2007).p.118

close relation with the characteristics of the population that has been previously known.[23]The samples of this research are two class of eleventh grade of Pondok Pesantren MTI Koto Tinggi Pandai Sikek. Researcher will choose XI IPS 1 and XI AGAMA 2 because they have the same English teacher that teaches using the same strategies. Thus, one of two classes will be chosen to be a control class and one class to be experimental class, the researcher will follow the steps below:

a. Collect the score of English student's test in the 11th grade of Pondok Pesantren MTI Koto Tinggi Pandai Sikek 2019-2020 academic year.

   Before doing the experiment, the researcher will collect the score of students' reading test to test the normality and homogeneity of the data.

b. Test the normality of the data.

   The purpose of testing the normality of the data is to know whether the data spreads out normally or not. Normality of the data is tested by using Liliefors test. It can be done in these steps below:

   1) Arrange the data from the lower to the higher
   2) Find the mean score ($\bar{x}$) and the standard deviation (SD)

$$(\overline{X}) = \frac{\Sigma X}{N}$$

[23]*Ibid* ..p.128

$$SD = \sqrt{\sum \frac{(xi\ \bar{x})^2}{n-1}}$$

3) Find the score of Zi by using this formula : Zi = $\frac{Xi-\bar{X}}{S}$
4) Find the score of P (Zi) by consult the score of Zi with Ztable
5) Find S (Zi)
6) Find the absolute score of P (Zi) – S(Zi)
7) Determine the higher score of obsulute mark F(Zi) – S (Zi). It is named with Lo (Liliefors)
8) Test the Lo score with Liliefors table with the certain degree of freedom (α): 0,05.
9) Take the conclusion, if Lo<Ltab or if Ltab>Lo it can be concluded that the data is distributed normally with the degree of freedom in (α) 5%.[24]

c. Test the homogeneity of the data

The purpose of homogeneity test is to know whether the population is homogeneous or not. This test is done by using F test. The homogeneity test by using F test was done by following step:

1) Find the mean score ($\bar{X}$)

$$(\bar{X}) = \frac{\Sigma x}{N}$$

2) Find the Standard Deviation (SD)

[24]Sudjana, *MetodaStatistika,* (Bandung PT. Tarsito, 2001),p.239

$$SD = \sqrt{\sum \frac{(Fx)^2}{n-1}}$$

3) Find the Variant (S^2)

$$S^2 = \frac{\sum(fx)}{n-1}$$

4) Find the F- obtained = $\frac{the\ higher\ variant}{the\ lower\ variant}$

5) Find the score F–table with the certain of level significance (α) 0,05

6) Take the conclusion, if the F- obtained <F –table, the data is homogeny.[25]

C. Instrumentation

The instrument use in this research is test that will be given as pretest and posttest. The test consists of 40 items, which are formulated in multiple choice items with four alternatives. In order to make that test become valid and reliable; the researcher will do the validity and reliability of the test. According to Sugiono, a valid research result is if there are similarities between the data collected with the data actually happened on the object under study.[26] Furthermore, research is reliable, if there is equality of data in a different time. As explained below:

[25] L.R. Gay, *Educatinal Research, Competencies for analysis and Application,*…p.102

[26]Sugiono, *MetodePenelitianPendidikan (Pendekatan, Kuantitatif, Kualitatif, dan R&D.…… p.172*

1. Validity

Validity in testing is to discover whether a test measures accurately what is intended to measure or it measures what it is purposed to measure. Arikunto says that a test can be said as a valid test if it measures what is supposed to measure and the instrument is callled as a valid instrument when it can give the true description about the data based on the rality or fact.[27] In this research, the validity use the expert validity.

2. Reliability

Test is reliable if it gives the constant result if the test is given to the some individual in another time. According to gay, reliability is the degree to which a test consistently measure whatever it measures. In other hand, if a test can give the current result as same as the previous test that had been conducted, that means that the test has a high reliability. This research was reliable because the test was scored by the researcher directly

The reliability of items using K-R 20 Suggested by Arikunto as follows:

$$r_{ii=}\frac{n}{n-1}\left[\frac{s^2-\Sigma pq}{s^2}\right]$$

Where:

[27] Suharsimi Arikunto, *Dasar Dasar Evaluasi : Revisi,* (Jakarta: Penerbit Bumi Aksara, 2007), p 58

r_{ii} = Reliability s^2

n = Number of items

p =Proportions of the number of students answer correctly

q =Proportions of the number of students answer incorrectly (q=1-p)

Σ_{pq} = Total number of p items to q

S = Standard – deviation

General description of coefficient correlation as follows:

0.80 <r_{ii}1.00 : Very high

0.60 <r_{ii}0.80 : High

0.40 <r_{ii}0.60 : Moderate

0.20 <r_{ii}0.40 : Low

0.0 r_{ii}0.20 : Very low

D. Technique of the Data Collection

This research will use the pretest to determine a student's baseline knowledge or preparedness for an educational experience or course of study. then, the researcher will collect the data based on the score of students' reading test. The data will be collected after the posttest of students. The researcher will give posttest to both experimental and control groups. The

posttest will be given in order to know the significant effect of students' reading ability after giving the treatment to the experimental group.

The researcher will take the scores students' reading based on scoring and measuring students' reading posttest. Then the researcher will compare the result of the test gained by the experimental and control groups in order to know whether the using of graphic organizer can give significant effect or not in improving the students' reading understanding.

E. Technique of the Data Analysis

This research will be done by using the t-test in analyzing the data. There are four formulas that used to analyze the data in this research. The first is used to find the average score of each group. The second is sum of square or variance. The third calculate standard deviation. The last calculate t-test formulate. Gay says that it uses to see significance of the different mean square between the two groups.[28]Furthermore, Margono says to test the large sample is used average and variation.

The average score is calculated by using the formula as follows:

$$\bar{x} = \frac{\sum x}{n}$$

Where :

$\bar{x}$ = average score

$\sum x$ = sum of data

N = Number of data

After that

[28] L. R. Gay, *Educational Research*, (Republic of Singapore: Merrill Publishing Company, 1990), p.399

The t-test is used as suggested by margono:

The formulas are as follows:

$$T = \frac{\bar{X}_A - \bar{X}_B}{\sqrt{\frac{n_A S_A^2 + n_B S_B^2}{n_A + n_B - 2}\left(\frac{1}{n_A} + \frac{1}{n_B}\right)}}$$

$$\frac{X_1 - X_2}{\sqrt{\frac{(SS_1 + SS_2)}{n1+n2-2}\ \frac{(1\ +\ 1)}{n1\quad n2}}}$$

Where:

For Hypothesis 1

T = the score of t- calculated (obtained)

$\bar{x}$A = mean score of the posttest of the experimental class

$\bar{x}$B = mean score of the pretest of the experimental class

S^2_A = variance posttest of the experimental class

S^2_A = variance pretest of the experimental class

n_A = Number of experimental class in posttest

n_B = Number of experimental class in pretest.[29]

1. Subtract 1 from the sample size to get the degrees of freedom.
2. Find the p-value in the t-table, using the degrees of freedom in Step 1, use 0.05 (5%).

[29]Margono, *Methodologi PenelitianPendidikan*, (Jakarta:PT. Rineka Cipta,2003),p. 198

3. Compare t-table value from Step 2to calculated t-value . The calculated t-value is greater than the table value at an alpha level of .05. The p-value is less than the alpha level: p <.05. We can reject the null hypothesis that there is no difference between means.

To find whether there is significant difference and whether graphic organizer is better then conventional strategy using formula as follows:

$$T = \frac{\bar{X}_A - \bar{X}_B}{\sqrt{\frac{n_A S_A^2 + n_B S_B^2}{n_A + n_B - 2}\left(\frac{1}{n_A} + \frac{1}{n_B}\right)}}$$

$$\frac{X_1 - X_2}{\sqrt{\frac{(SS_1 + SS_2)}{n1+n2-2}\ \frac{(1\ +\ 1)}{n1\quad n2}}}$$

Where:

For hypothesis 2 and 3

T = the score of t- calculated (obtained)

$\bar{x}$A = mean score of the posttest of the experimental class

$\bar{x}$B = mean score of the posttest of the control class

S^2_A = variance posttest of the experimental class

S^2_A = variance posttest of the control class

n_A = Number of students in experimental class posttest

n_B = Number of students in control class posttest

1. Subtract 1 from the sample size to get the degrees of freedom.

2. Find the p-value in the t-table, using the degrees of freedom in Step 1, use 0.05 (5%).

3. Compare t-table value from Step 2to calculated t-value. The calculated t-value is greater than the table value at an alpha level of .05. The p-value is less than the alpha level: p <.05. We can reject the null hypothesis that there is no difference between means.

While for hypothesis 3 in order to find out whether students' reading ability taught by graphic organizer is better than students who are not taught by it using formula as follow:

$\bar{x}_A > \bar{x}B$

$\bar{x}_A$ = mean score of the posttest of the experimental class

$\bar{x}_B$ = mean score of the posttest of the Control class

It means that Ha is accepted and H0 is rejected

While

$\bar{x}_A > \bar{x}B$

$\bar{x}_A$ = mean score of the posttest of the experimental class

$\bar{x}_B$ = mean score of the posttest of the Control class

It means that H0 is accepted and Ha is rejected.

CHAPTER IV

FINDINGS AND DISCUSSIONS

A. Findings

1. Description of the Data

In this section, researcher would like to describe the finding from pre-test and post-test from both control and experiment class

a. Data from the Pre-test of Experimental and Control Group

Pre-test was the data analysis that had been given by the researcher at the first meeting before conducting the treatment for experimental class by graphic organizer : fishbone.

The result of pre-test scores attained by the control and experimental group is as follows:

Table 4.1
Pre-test Score of the Control and Experiment Class

Score Range	Control (f)	Experiment(f)
0-10	0	0
11-20	0	0
21-30	1	0
31-40	1	2
41-50	3	2
51-60	7	8
61-70	8	7
71-80	0	1
81-90	0	0
91-100	0	0
Total	20	20

Figure 4.1 Pre-test Score of the Control and Experiment Class

Based on the table, it can be seen that there were 0 student from control and experiment class who got score between 0-10. There were 0 student from control and experiment class who got score between 11-20 There were 1 student from control class and 0 student who got scores between 21-30. There were 1 student from control class and 2 students from experiment class who got score between 31-

40.There were 3 students from control class and 2 student from experiment class who got scores between 41-50. There were 7 students from control class and 8 student from experiment class who got scores between 51-60. There were 8 students from control class and 7 student from experiment class who got scores between 61-70. There were 0 student from control class and 1 student from experiment class who got scores between 71-80. There were 0 student from control class and 0 student from experiment class who got scores between 81-90. Last, there were none of the students from both class who got score between 91-100.

Then, the data above was calculated in order to find out the mean score, minimum score, and maximum score of the students from both control and experiment class.

Table 4.2 Descriptive Statistic from Pre-test of Control and Experiment Class

Class	Min Score	Max Score	Mean Score
Control	30	72	50
Experiment	38	74	51

Based on the table above, the minimum score from pre-test of the control class was 30 while the experiment class was 38. The maximum score from the control class was 72 while from the experiment class was 74. The mean score from the control class was 50 while the experiment class was 51.

Based on the data above, it can be seen that there still no significant different between control and experiment class. this pre-test was taken before the students from the experiment class was given a treatment of using graphic organizer : fishbone.

b. Data from the post-test of Experimental and Control Group

Post-test was the data analysis that had been given by the researcher at the last meeting after conducting the treatment for experimental class by using graphic organizer : fishbone.

The result of post-test scores attained by the control and experimental group is as follows:

Table 4.3
Post-test Score of the Control and Experiment Class

Score Range	Control (f)	Experiment(f)
0-10	0	0
11-20	0	0
21-30	0	0
31-40	0	0
41-50	0	0
51-60	9	3
61-70	8	2
71-80	3	12
81-90	0	2
91-100	0	1
Total	20	20

Figure 4.2 Post-test Score of the Control and Experiment Class

Based on the table and the figure above, it can be seen that there were 0 student from control and experiment class who got score between 0-10. There were 0 student from control class and experiment class who got scores between 11-20. There were 0 student from control class and experiment class who got scores between 21-30. There were 0 student from control class and experiment class who got scores between 31-40. There were 0 student from control class and experiment class who got scores between 41-50. There were 9 students from control class and 3 students from experiment class who got score between 51-60. There were 8 students from control class and 2 student from experiment class who got scores between 61-70. There were 3 students from control class and 12 student from experiment class who got scores between 71-80. There were 0 student from control class and 2 student from experiment class who got scores between 81-90. Last, there were none of the students from control class and 1 student from experiment class who got score between 91-100.

Then, the data above was calculated in order to find out the mean score, minimum score, and maximum score of the students from both control and experiment class.

Table 4.4 Descriptive Statistic from Post-test of Control and Experiment Class

Class	Min Score	Max Score	Mean Score
Control	52	72	60
Experiment	60	90	74

Based on the table above, the Minimum score from post-test of the control class was 52 while the experiment class was 60. The maximum score from the control class was 72 while from the experiment class was 90. The mean score from the control class was 60 while the experiment class was 74.

Based on the data above, it can be seen that there were significant different between control and experiment class. This post-test was taken after the students from the experiment class was given a treatment by using graphic organizer : fishbone.

2. Analysis of the Data

In this section, the researcher provided the analysis of the data pre-test, and post-test. This section covered normality of pre-test and post-test, homogeneity of the data, and the testing of hypothesis.

a. Normality of the Data

1) Pre-test

The normality of the pre-test was calculated by using SPSS 22. The result of the normality test from the pre-test can be viewed on the table below:

Table 4.5 Normality Test of Pre-test

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cont	0,229	13	0,060	0,881	13	0,071
Exp	0,220	13	0,082	0,960	13	0,109

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

The Data is normal if Sig. (p value) > 0.05 and is not normal if Sig. (p value) < 0.05. On the table above there are Kolmogorov Smirnov and Shapiro-Wilk, if the data is more than 50, it is better to use Kolmogorov-Smirnov. Since the data is less than 50, the researcher used Shapiro-Wilk Based on the table above the Sig. (p value) of both class is 0.071 and 0.109 which are bigger than 0.05, it means that the data distributed normally.

2) Post-test

The normality of the pre-test was calculated by using SPSS 22. The result of the normality test from the post-test can be viewed on the table below:

Table 4.6 Normality Test of Post-test

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Post-test Control	0,130	13	0,200*	0,919	13	0,412
Post-test Experiment	0,144	13	0,200*	0,944	13	0,535
*. This is a lower bound of the true significance.						
a. Lilliefors Significance Correction						

The Data is normal if Sig. (p value) > 0.05 and is not normal if Sig. (p value) < 0.05. On the table above there are KolmogorovSmirnov and Shapiro-Wilk, if the data is more than 50, it is better to use Kolmogorov-Smirnov. Since the data is less than 50, the researcher used Shapiro-Wilk Based on the table above the Sig. (p value) of both class is 0.412 and 0.535 which are bigger than 0.05, it means that the data distributed normally.

b. Homogeneity Test

The homogeneity test was tested by using SPSS 22. The result of the calculation can be viewed on the table below:

1) Pre-test

Table 4.7 Homogeneity test of Pre-test

		Levene's Test for Equality of Variances	
		F	Sig.
Pretest	Equal variances assumed	0,930	0,224
	Equal variances not assumed		

One of the ways to determine the data is homogenous or not is to compare the Sig.(p value) with the level of significance which is 0.05. The Sig. (p value) is 0.224 > 0.05, then the data is homogenous.

2) Post-test

Table 4.8 Homogeneity test of Post-test

		Levene's Test for Equality of Variances	
		F	Sig.
Pretest	Equal variances assumed	2,247	4,016
	Equal variances not assumed		

One of the ways to determine the data is homogenous or not is to compare the Sig.(p value) with the level of significance

which is 0.05. The Sig. (p value) is 4.016 > 0.05, then the data is homogenous.

This homogeneity of both post-test and control class had function to see between the two classes are homogenous or not. When they are homogenous, the t test as the formula to test the hypothesis can be analyzed

c. Testing the Hypothesis

After finding the mean score and the value of the t obtained by using t-test of the both classes, the hypothesis was tested. The hypothesis in this research, there is any significant effect of graphic organizer : fishbone toward students' reading. The researcher used the formula to find whether Ha was accepted or rejected, the value of the t obtained was compared with the value of the t table. If the value of the t obtained is bigger than the value of the t table or t obtained located between –t table and +t table, the hypothesis (Ha) is accepted.

Table 4.9 Hypothesis (t-test)

		T	df
Hypothesis	Equal variances assumed	5	18
	Equal variances not assumed	5	11,804

Based on the table above, the t-obtained was 11,804. Meanwhile, the t-table for df=18 was 2,061. The researcher then compared the t-obtained with the t-table. The result was the t-obtained was bigger than the t-table (9,922>2,061).

From the data, it means that there is a significant effect of graphic organizer : fishbone towards students' reading which is alternate hypothesis (H_a) is accepted or there is no significant effect of graphic organizer : fishbone towards students' reading which is null hyphothesis (H_0) is rejected because the t-obtained was bigger than the t-table. So, it can be concluded that there is a significant effect of graphic organizer towards students' reading.

B. Discussion

Based on the finding of the research, it was found that using graphic organizer : fishbone has significant effect toward the students' reading. The mean score of the experiment after taking the graphic organizer : fishbone as the treatment was bigger than the mean score of the experiment class before taking it (51 to 74). This statements was also supported by the t-test, where the t-obtained was bigger than the t-table ((5>2,061).

This result of the research support the theory from Margareth Cleveland.[30]Graphic Organizer : Fishbone help students analyze what their reading. Students can use to recognize patterns in their reading, such as identifying the main idea of a story or an article, and finding details that support the main idea. That can help students to compare and contrast things within a story or between two stories.

Students reading on graphic organizer : fishbone are reading to understand what the text means and can be the main key in answering long text reading question. Students can isolate specific information to record on the organizer, students make decision regarding its relevance, there is by increasing their understanding that not all text is of equal importance.

[30] Margareth Cleveland, *Content – Area Graphic Organizers* (Social Studies, 2004) p.3

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

Based on the finding of the research, the research question “Is there any significant effect of “the effect of graphic organizer: fishbone strategies towards students’ reading ability at the eleventh grade students in Pondok Pesantren MTI Koto Tinggi Pandai Sikek” and “Is student writing ability in writing explanation text taught by using graphic organizer fishbone as a strategies better than students who are not taught by it? Here answered. First, it was found that using graphic organizer : fishbone has significant effect toward the students’ reading. This statements was also supported by the t-test, where the t-obtained was bigger than the t-table ((5>2,061). Second, The mean score of the experiment after taking the graphic organizer : fishbone as the treatment was bigger than the mean score of the experiment class before taking it (51 to 74).

B. Suggestion

Based on the findings of the research, the researcher would like to propose some suggestions as following:

1. Based on the result of the research, the English teacher is recommended to use graphic organizer : fishbone as a strategy to teach reading.
2. The researcher are hoped to guide students in using graphic organizer : fishbone to help the students improving their reading.
3. Further researchers are suggested to conduct a study on the same variables using skill on writing.

REFERENCE

David Nunan, *Language Teaching Methodology,* (A textbook for Teacher, 2007) p.70

David Nunan, *Practical English Language Teaching*..., p. 74-77

Emzir, *Metodologi penelitian pendidikan: kuantitatif dan kualitatif*, *(*Jakarta:RajawaliPers, 2012). P. 63

Hall and Strangman, *Graphic Organizers,* (2002), Page 1

Judi Morcillon, *Collaborative Startegies For Teaching Reading Comprehension* (USA:American Library Association, 2007) p.10

Kaoru Ishikawa, *Introduction to Quality Control,* p 152

Margareth Cleveland, *Content – Area Graphic Organizers* (Social Studies, 2004) p.3

Margono.*MetodologiPenelitian Pendidikan*.(Jakarta:PT. RinekaCipta.2007).p.118

Marian Sainsbury & Collin Harrison. *Assesing Reading :From theories to classroom* p. 38-49

M.F. Patel and M Jain, *English Language Teaching* (Methods, Tools, & Techniques, 2008) p.113-114

Ray Hilborn & Mangel,. *The ecological detective : confronnting models with data.* (Princeton University Press. 1997) p. 24

Shields, Patricia and Rangarjan, N. A Playbook for Research Methods : Integrating Conceptual Frameworks and Project Management. (OK: New Forums Press. 2013.) p. 24

Sudjana, *MetodaStatistika*, (Bandung PT. Tarsito, 2001),p.239

Sugiono, *Metode Penelitian Pendidikan (Pendekatan, Kuantitatif, Kualitatif, dan R&D),* (Bandung: Alfabete, 2009). P. 13

Theodore T Allen, *Introduction to Engineering Statistics and Lean Sigma* (2005 Second Edition), Chapter 5

William Golding, *Down to the Bones: Fishbone Map* (2009) p 22