## PAIR WORK TECHNIQUE IN TEACHING READING COMPREHENSION

(Quasi Experimental Research at the Eleventh Grade of MA Ma'arifBalong in Academic Year 2016/2017)

## THESIS



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#### Abstract

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## Key Words: Pair Work, and Reading Comprehension.

Reading is a process in getting a meaning from written symbols. By strengthening reading skills, students will be able to develop other areas of learning. Pair work is a generic term covering a multiplicity of technique in two students is assigned a task that involves collaboration and self-initiated language.

The statement of the problem of this research is as follow: Do the students who are taught by using Pair Work get better score than those who are not taught by using Pair Work. This aims of this research to investigating the students' reading skill achievement in Pair Work technique for eleventh grade students of MA Ma'arif Balong in academic year 2016/2017.

The design of the research was quantitative, quasi experimental and used nonequivalent (Pretest and Post test) experimental group and control-group design. This study was carried at the eleventh students of MA Ma'arif Balong in April, 21 ${ }^{\text {st }}$ 2017. This study assigned two classes; they are 21 students of XI B as an experiment class which taught using pair work technique and 21 students of XI A as control class which not being taught using pair work technique. The procedures of data collection were measurement, communication, and documentation. To analyze data, the researcher used t-test form as a procedure of data analysis.

The result shown that average score of XI B's pretest was 36,7 and posttest was 73,2 whereas XI A's pretest was 37,1 and posttest was 70,1 . The result of the research showed that in $5 \%$ significant level $t_{0}=4,546$ and $t_{t}=2,02$, so $t_{0} \geq t_{t}$. Whereas $1 \%$ significant level $t_{0}=$ 4,546 and $t_{t}=2,71$, so $t_{0}>t_{t}$. Based on the result, it could be concluded that $t_{0}>t_{t}$. It means that Ha was accepted and Ho was rejected.

So, the result of the data analysis above, the researcher concluded the students taught by using Pair Work technique achieved better score than there is a significant in MA Ma'arif Balong. In other word, the Pair Work technique is effective for XI B and XI A to the eleventh grade of MA Ma'arif Balong in academic year 2016/2017. The researcher should be able to use the application in learning English especially in reading to make the students motivated in reading.

## CHAPTER I

## INTRODUCTION

## A. Background of the study

English is being a subject matter in school that covers the four basic language skills, they are: listening, speaking, reading, writing. The students can develop their language by enveloping their skills. One of the important skills in English language learning is reading. Reading is fluent process of readers combining information from the text and their own background knowledge to build meaning.

According to Nunan, "Reading is the process of decoding written symbols, working from smaller unit (individual letters) to larger one (words, clause, and sentence). ${ }^{1}$ It means that reading is process to understand the text.

Reading is an 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 not only in learning English, but also in learning in any content class where reading in English is required. With strengthened reading skills, learner will make greater progress and developed in all other areas of learning. ${ }^{2}$

[^0] Inc, 2003).p. 69.

Based on observation at the eleventh grade of MA Ma'arif Balong. According to Mr. Bustanul Arifin as the English teacher at MA Ma’arif Balong, he gets difficulties in teaching English especially in reading comprehension. ${ }^{3}$ In the reading text, the students do not understand about the content of the text that they read, especially in hortatory exposition text. Many students feel difficult because limited vocabulary and memory. Some of them never practice to read the text because they don't have passion to read. The fact shown that there was a few of students capable to understand the concept of the text and many students get low achievement in the final examination. And from this case is needed a creative efforts to change technique of English teacher to make the students easily to comprehend the text.

Like any other skills, learner gets better at reading by practicing. And if they do not practice, they will not get better and their skills may deteriorate. The reading activities must be doing continues, not only in the classroom or school but also in spent time. By reading the students can enlarge their knowledge and also help for building the meaning of the text. ${ }^{4}$

According to Andrew P. Jhonson, Comprehension skill are strategies readers use to retrieve information and construct meaning from expository text. ${ }^{5}$ According Bambang Yudi Cahyono \& Nur Mukminatien, comprehension is making a sense out of a text as the result of interaction between the perception of

[^1]graphic symbols that represent language and the reader's prior knowledge. Therefore, reading comprehension is a process of getting information from the text context and combining disparate elements into new whole. It is a process of using reader's existing knowledge to interpret text in order to construct meaning. ${ }^{6}$ So, reading comprehension very needed to know main idea from the text. And the reading is followed by comprehension or it can be separated from comprehension, because a reader has to comprehend what he/she reads to get information from the text or a book. Some linguist had discussed about definition of comprehension.

A general assumption about reading is that students improve their reading activities and reading a lot. In fact the students are still finding the difficulties in the reading process. Therefore, the teacher must used technique that appropriate to increase the students reading ability. One of the techniques that can be the student master in teaching reading comprehension is pair work technique. According to Phipps, "Working with a partner is much less intimidating than being singled out to answer in front of the class, and it brings a realistic element into the classroom by simulating the natural conversational setting". The use of pair work techniques can influence the students' interest and comprehension. ${ }^{7}$

Pair work technique is one of the interaction patterns used in the modern languages classroom, such as English as a second language (ESL) or English as a

[^2]foreign language (EFL). ${ }^{8}$ It's useful to achieve the instructional goals of teaching and learning process, and they can also be easily found in our daily lives. Having understood that the students pay short attention and concentration in a learning process, it is better to provide something playful to them. In this study, the writers to use pair work technique, for teaching English reading comprehension to senior high school students.

Using the pair work as an alternative medium of teaching to senior high school students could be considered as the best way since it places them a lot. Furthermore, it is a precious resource to develop students' abilities in listening, speaking, reading, and writing. The writer is interested in using pair work in order to enrich and improve the mastery of the students' reading comprehension ability. By using the pair work, it is hoped that the student can enjoy the teaching and learning process and can memorize the words easily.

Based on the observation above, the writer wants to examine "PAIR WORK TECHNIQUE IN TEACHING READING COMPREHENSION (QUASI EXPERIMENTAL RESEARCH AT THE ELEVENTH GRADE OF MA MA'ARIF BALONG IN ACADEMIC YEAR 2016/2017)".

[^3]
## B. Limitation of the study

To avoid arranging discussion, limitation of the study is focused some:

1. The subject of the study is the eleventh grade of MA Ma'arif Balong in academic year 2016/2017.
2. The subject of this study effectiveness of using pair work technique in teaching reading comprehension and using hortatory exposition text.

## C. Statement of the problem

Regarding to the background of the study, the statement of the problem is formulated into:

Do the students who are taught by using Pair Work get better score than those who are not taught by using Pair Work?

## D. Objectives of the study

Related to the statement of the problem above, the objective of this study is described as follows:

To know the significance difference on student's achievement who are taught by using pair work technique and without pair work technique at the eleventh grade students of MA Ma'arif Balong in Academic year 2016/2017.

## E. Significance of the study

The researcher really hopes that the result of the research will be useful theoretically and practically.

1. Theoretically

After research, it is expected to give contribution for knowledge to develop the teaching and learning process especially in reading. This research is also expected to improve the perspective that reading easy.
2. Practically
a. The Researcher

The researcher hopes that this research will give the new experience and knowledge, especially in teaching English lesson.
b. The Teachers

It is expected to give useful contribution for teachers to help them in teach their student especially in developing reading skill. This is especially for English teacher of MA Ma'arif Balong in improving teaching skill by using pair work technique, it is also can motivate English teacher to be a professional teachers who is creative and innovative teachers.
c. The Readers

The research is expected to give readers, particularly the students of English Education Department of The Institute for Islamic Studies of Ponorogo, in enriching references concerned with English Teaching and Learning, especially Pair Work Technique to develop Reading Comprehension mastery of the students.
d. The Students

It is expected to be useful for students MA Ma'arif Balong in academic year 2016/2017 who is attending the class. It makes their study more active, enjoy, and it also can increase their reading skill.

## F. Organization of the thesis

To make easy to arrange the study, in this section will explain about the organization of the thesis. There are five chapters. They are:

Chapter I : Introduction. That contain of background of the study, limitation of the problem, statement of the problem, objective of the problem, and significance of the study, and organization of the thesis.

Chapter II : Review related literature. This chapter gives the explanation about the theoretical background of the research consist of theoretical analysis, previous study, theoretical framework, and hypothesis.

Chapter III : Research methodology. Consist of research design, population and samples, instrument of data collection, technique of data collection, and technique of data analysis.

Chapter IV : Finding and Discussion. In this chapter writer tells about the research location, data description, data analysis, and discussion.

Chapter V : Closing. In this chapter consists the writer tells about of the conclusion and recommendation.

## CHAPTER II

## REVIEW OF RELATED LITERATURE

## A. Theoretical Analysis

## a. Reading Comprehension

## 1. Definition of Reading Comprehension

Nunan says, "Reading is fluent process combining information from a text and their own background knowledge to build meaning. The goal of reading comprehension". ${ }^{9}$

As Neil .J. Anderson says that, reading can be defined simply from print. The four key elements combine in the process of making meaning from print. There are: the readers, the text, reading strategies, and fluency. Again Neil .J. Anderson states reading as the process of readers combining information from the text and their own background knowledge to build meaning. ${ }^{10}$

In the same line Caroline T. Linse states that reading is a set of skills that involves making sense and delivering meaning from printed words. ${ }^{11}$

[^4]Reading is a thinking process. The act of recognizing words requires interpretation of graphic symbols. In order to comprehend a reading selection thoroughly, a person must be able to use information to make inferences and read critically and creatively to understand the figure language, determine the author's purpose, evaluate the ideas presented, and apply the ideas to actual situations. ${ }^{12}$

From the explanation above, it can be inferred that reading is having a goal to create the students understanding of the meaning from any literatures.

## 2. Strategy in reading comprehension

Reading is frequently seen a passive skill, but it is active skill. Readers need to be active in the learning, they need to be able to relate and to understand the text. ${ }^{13}$

According to Pamungkas and Mukminaten, there are some kings of reading to help the reader be active and careful in reading, they are:

1. Mapping

Mapping is identifying meaning of a text through features. Mapping, also called clustering or webbing, is a visual form of brainstorming. When readers actually see ways ideas connect to the next, they begin to think more creatively.

[^5]2. Skimming

Skimming is aimed at getting quickly the main ideas and the purposes of reading selection. Skimming is very useful aid to help students find out information wished quickly. In skimming, readers just see the text at a glance; readers just survey the text without carefully reading it. They only use the clues in the book to get information needed.
3. Scanning

Unlike skimming that is looking for getting the most important information, the main ideas of a text, scanning is aimed at looking for and getting the details, facts, numbers, and specifics bits of information in the text. Readers apply scanning in reading to locate specific information and get an initial impression of whether the text is suitable for a given purpose. ${ }^{14}$

## 3. Elements in reading comprehension

There are three elements of reading comprehension. Comprehension entails three important elements: readers, text and activity. Reader refers to the person who is doing the reading, the text refers to be comprehend, and activity refers to the ongoing process of achieving deep understand.

[^6]a. Reader

The reader, when he or she is the purpose of comprehending a text, must have a wide range of capacities and abilities. They include cognitive capacities, motivation, and various types of knowledge. The cognitive capacities include attention, memory, and critical analytic ability, inference, visualization ability, etc. Meanwhile, motivation refers to the purpose of the reader in reading, an interest to text being read, and self efficacy as a reader. Finally, various type of knowledge includes vocabulary mastery, domain and topic knowledge, linguistic and discourse knowledge, and knowledge for certain comprehend strategies.
b. Text

The features of the text have a large effect on comprehension. Comprehension does not occur by simply extracting meaning from text. During reading, the reader construct different representations of the text that are important for construct different representations include.
c. Activity

Reading does not vacuum. It is done for a purpose, to achieve some end. A reading activity involves one or more purpose, some operations to process the text at hand the consequences of performing activity.

The purpose is influenced by a cluster of motivational variables, including interest and prior knowledge. ${ }^{15}$

## c. Pair Work Technique

## 1. Definition of Pair Work

Pair-work is one of the interaction patterns used in the modern languages classroom, such as English as a second language (ESL) or English as a foreign language (EFL). According to Phipps, pair-work is "for any form of pupil-pupil interaction without the intervention of the teacher". ${ }^{16}$

According to Phipps, "Working with a partner is much less intimidating than being singled out to answer in front of the class, and it brings a realistic element into the classroom by simulating the natural conversational setting". The use of pair work techniques can influence the students' interest and comprehension. ${ }^{17}$

According to Jo McDonough, Christopher Shaw, and Hitomi Masuhara, pair work requires rather organization on the part of the teacher and, at least in principle, can be activated in most classrooms by simply having learners work with the person sitting next to them (although other kinds of pairing - for example, according to proficiency - may be more

[^7]suitable depending on the task). The time taken for pair work to be carried out need not be extensive, and there is a very large range of possible tasks throughout the whole spectrum of functions we have identified, from fully communicative, 'simulated', structure and vocabulary practice, to those where an important aim is to set up co-operative habits. ${ }^{18}$

Lightbown and Spada said, that in an interactive environment, children are able to advance to a higher level of knowledge and performance than they would be capable of independently. Working in pairs could help to promote meaningful interaction between the learners and as a result that will increase their interest. When they state that "positive attitudes and motivation are related to success in second language learning" ${ }^{19}$

In pair work students can practice language together, study a text, research language or take a part in information-gap activities. They can write dialogues, predict the content of reading texts, or compare notes on what they have listened to or seen.

## 2. Advantages of Pair Work

In Pair Work activities, students are encourages to:

1. It class dramatically increases the amount of speaking time any one student get in the class.

[^8]2. It allows students to work and interact independently without the necessary guidance of the teacher, thus promoting learner independence.
3. It recognizes the old maxims that two heads are better than one.' And in promoting cooperation helps the classroom to become a more relaxed and friendly place. If we get students to make decision in pairs (such as deciding on the correct answer to question about a reading text), we allow them to share responsibility rather than having to hear the whole weight themselves
4. It is relatively quick and easy to organize. ${ }^{20}$

## 3. Pair work is necessary

According to Byrne says, that unless have a very small class, will never be able to give the students enough oral practice through whole class work. If divide the students into pairs for just five minutes, each student will get more talking time during those five minutes than during the rest of the lesson. From the learners' point of view then, some pair work in the course of the lesson is absolutely essential. ${ }^{21}$

According to Lewis and Hill support, that who claims that if language learning is to be a natural and relatively relaxed process the

[^9]general sequence will almost inevitably bewhen the students work with each other asking and replying to each other in more or less controlled pair work. In general the lesson develops from strictly controlled pair work, where each individual question and answer is predictable, to less controlled pair work where individual students have a wide range. This is the student-to-student phase. There is a development from teacherdominated to student-dominated activity. ${ }^{22}$

## 4. Types of interaction in Pair Work

According to Scrivener, pair work is a type of classroom interaction when students are working with another student. This may be to discuss something, to check answers, to do a communicative activity. There are five types of student grouping common in the classroom:

1. The class working together with the teacher
2. The whole class mixing together as individuals
3. Small groups (three to eight people)
4. Pairs
5. Individual work. ${ }^{23}$

Penny Ur describes several interaction patterns. She considers pair work to be a kind of collaboration. She has listed types of

[^10]Edition. (Mcmillan: 1994).p. 214.
interaction patterns in order from the most teacher-dominated to the most student-active:

1. Teacher talk
2. Choral response
3. Closed-ended teacher questioning
4. Open-end teacher questioning
5. Student initiates, teacher answers
6. Full-class interaction
7. Individual work
8. Collaboration
9. Group work
10. Self-access

A part from 'open pairs', where students talk to one another across the class under your control, ${ }^{24}$ according to Byrne there are two main kinds of pair work. These are fixed pairs and flexible pairs. Fixed pairs are originated when the students work with the same partner is usually the student on the left or the right) in order to complete a task of some kind. In flexible pairs the students keep changing partners. Teacher must decide whether he can let the students stand up and move around the classroom freely. This will make the activity more interesting for them because they can choose the person they want to talk to.

[^11]If the classroom is too small, the students will be able to interact with those around them without getting up. ${ }^{25}$

## 5. Kinds of pair work.

According to Harmer In the pair work students can practice language together, study a text, research language, or take part in information activities. They can write dialogues, predict the content of reading texts, or compare notes on what they havelistened to or seen" here as many kinds of pair work, there are:

## 1. Conversation

Conversation is the first kind of pair work because students communicate or share about opinion, ideas, and feeling with their friends. Besides that, conversation activity can increase the students' vocabulary and pronunciation.
2. Dialogue

This activity also same with conversation activity that need two members to practice it. Generally, the dialogue should be four or to six lines ling. That mustinclude grammatical items and vocabulary, which the students need to master as well as the items of typical feature of spoken English, such as short answer, contracted word, and question tag. Before students act their dialogues, the teacher gives some

[^12]instruction for the ways of dialogue or gives the theme for dialogue activity. This activity draws on cognitive skills to produce appropriate language incontext.
3. Story telling with picture

This kind is getting the information from the picture and explains about picture as the story telling, after that gives the chance for the one number to explain thepictures which has selected by English.

Description pair work technique: This strategy has three steps. First, students think individually about a particular question or scenario. Then they pair up to discuss and compare their ideas. Finally, they are given the chance to share their ideas in a large class discussion. ${ }^{26}$

## 6. Stages of Pair Work in Task-Based Learning (TBL)

According to Ellis R. here as the stages of pair work in Task-Based
Learning (TBL):

1. Pre-task

Pre task phase is a process where the topic introduced and the instructions of the tasks are given by the teacher. The teacher helps the students to recall some language that may be useful for the task afterwards.

[^13]
## 2. During Task

During task the actual pair work or group work is carried out. The teacher is to assist the students in negotiating words or phrases, grammar, and pronunciation when and where needed. The teacher is also available for students to call for advice or to feed in language. ${ }^{27}$

## 3. Post task

According to Frost R., post task where a report by the students to the whole class is conducted in the form of class discussion, with the teacher acting as the leader in the process. Incidental topics and vocabulary may appear during this phase. ${ }^{28}$

## 7. Pair work in the lesson

According to Nunan defined task as: a task is a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused on mobilizing their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than to manipulate form. ${ }^{29}$

According to Peter Watcyn-Jones says, that suggests several types of activities for working in pairs, e.g. ice-breaker/warm-up activities.

[^14]Peter uses warm-up activities for fun and to "break the ice" and for students to get know more about one another. In role-plays and simulations students play simple roles or act out situations they could find themselves in, such as ordering meal at a restaurant. Often the shyest students come to life when hiding behind a role. Information-gap activities are activities where students have to perform a task together. In some cases, one student has access to part of the information only, but by working together, they have to solve the whole. Indiscussion activities they often exchange views or opinions and express agreement and disagreement. These are often referred to as 'opinion gap' activities. Cards and board games involve the use of cards or a board in some form or other. They are often game oriented. In problem-solving activities the students have to solve problems of various kinds such as jigsawreading problems and so on. Vocabulary activities concentrate on vocabulary learning or revision. ${ }^{30}$

A lively stimulation of communication exchanges between the students is expected to occur more in pairs. According Jones says, that the atmosphere in pair work is tends to more protective and private than in a group. Students often feel less inhibited in a pair, and they can talk about more personal feelings or experiences than they would even in a small group. Pairs seem to be more conducive to cooperation

[^15]and collaboration, while groups tend to be more conducive to (friendly) disagreement and discussion. ${ }^{31}$

According to Scrivener says, that also suggests several communicative activities in pairs such as pair interview, pairs compare, picture difference, stamp collecting, planning a holiday and survival. It's also useful to remember that students should have a genuine need or a reason to speak together. Simply telling them to work in pairs does not make it a valid or useful technique. Creating a need to talk together either because they are sharing ideas and information or because they have different pieces of information or different opinions will make pair work far more meaningful. If one student describes a picture in the textbook while the other students look at it, the communication is meaningles. It can, however, transform it very easily. If a learner describes a picture that the others cannot see and the listeners have a task, drawing a basic sketch of that drawing, then there is real communication and the 'describers' and 'artists' will interact with a specific purpose.

This classroom activity effectively mirrors activities that learners might be involved in when using the language in the outside world listening to a description of something over the phone, for instance. In real

[^16]communication the language that the students use is largely unpredictable.
There may be many ways to achieve a particular communicative goal. ${ }^{32}$

## B. Previous Study

The research needs some previous research as a consideration theory. The detail explained as follow:

The first previous research finding is written by Ayuz Sinta Widayati the thesis was entitled "The Application of Pair Work Technique in Teaching Speaking of SMPN 1 Siman Ponorogo". The results of the study showed that it is really contrasted with the method of CLT. There should be a motivation either from the students or the teachers of English as a Foreign Language (EFL teachers). There is no problem with CLT, but the problem is in the way of teaching and learning activities by the Indonesian students and teachers. It should be changed to the other way such as teaching by using CLT approach. "There is a significance difference between the students who are taught by pair work and the student who are not taught in speaking skills. So, the students more interesting to learn English especially in speaking mastery uses pair work", ${ }^{33}$

Another reason by Said Zohairy from MA, University of Sunderland the thesis was entitled "Effective Pair Work Strategies to Enhance Saudi PreIntermediate College Students' Language Production in Speaking Activities".

[^17]The result of the study is really contrasted with classroom dynamics remained one of the most critical areas in the field of English language teaching and methodology. Pair work and pairing strategies have been the focus of this study in regards with increasing language production in speaking activities for Saudi Preintermediate college student. The result of the study showed that some discrepancies between teachers' and students' perception of pair work strategies. Saudi students prefer to pair up with a higher-level student (L-H) as they tend to rely on colleagues to complete tasks rather than asking teacher to help. On the contrary, teachers prefer same-level pairing to provide equal learning opportunities for all students. ${ }^{34}$

The third is by Olcay Sert from Department of English Language Teaching at Hacettepe University the thesis was entitled "A Comparative Analysis of Pair-Work and Individual Assignments In Two ELT Grammar Classes". The result of the study showed that is really contrasted when compared to individually prepared assignments in many respect in foreign language learning context. Results indicate a variety of advantages of student collaboration in preparing written work since outputs are far more grammatical, include less spelling mistakes, and indicate a higher level of grammatical awareness.

[^18]Additionally, pair-work helps students build positive interpersonal relationships and create a high level of academic solidarity and confidence. ${ }^{35}$

Related to this research, the researcher realizes that a successful teaching reading depend on the professional teacher and technique used. The different with researcher's thesis is using a quantitative as a research design and quasi experimental research used nonequivalent (Pretest and Post test) experimental group and control-group design. The researcher used t -test as analyze the data and the researcher wants to know the students' achievement in reading comprehension. Except that, the reading comprehension using pair work technique can improve their achievement and practice to read a text with other member of group.

## C. Theoretical Framework

Theoretical framework is a concept in the thesis about how the theories can be related with the factors which are identified as the important problems.

The thesis has experimental research, the theories description is:
X = Pair Work
$\mathrm{Y}=$ Reading Comprehension
Reading comprehension is very important in language teaching. Without reading it is impossible to be able to understand the meaning. In the learning process the teacher should chooses the suitable technique for teaching based

[^19]on the subject matter. Because, when the teacher used suitable technique it will give a big effectiveness to make successful in study.

There are many techniques in that used to teaching reading comprehension; one of this is pair work technique. The students will be more active and creative to study using pair work.

Based on the theoretical analysis above, the theoretical framework can be stated as follows:
a. If the result of implementation of Pair Work technique is good, the students reading comprehension will be increase.
b. If the student's scores taught by using Pair Work technique are better than the students who are not taught by using Pair Work technique, it means using Pair Work technique is effective technique in teaching reading comprehension.

The researcher concludes that pair work technique is effective in reading comprehension at the eleventh grade of MA Ma'arif Balong in academic year 2016/2017.

## D. Hypothesis

Hypothesis in this research are:
$\mathrm{H}_{\mathrm{a}} \quad:$ Pair work technique is effective to teach reading comprehension for eleventh grade of MA Ma'arif Balong in academic year 2016/2017.
$\mathrm{H}_{0} \quad:$ Pair work technique is not effective to teach reading comprehension for eleventh grade of MA Ma'arif Balong in academic year 2016/2017.

## CHAPTER III

## RESEARCH METODOLOGY

## A. Research Design

The research design is very important in a research; because it is hoped can be basics to face the specific problem or practical actions of the incidents. Research design is a plan of collecting and analyzing data in order to match the research objective. ${ }^{36}$

Research is divided into quantitative and qualitative method. Quantitative research is the research based on positivism philosophy, used for researching a population or sample, collecting data of sample uses random and applies research instrument, and analyzing data used statistical analysis with the purpose to prove a hypothesis. ${ }^{37}$

Quantitative method consists of two kinds. They are experimental (true experimental, quasi experimental and weak experimental) and no experimental (descriptive, survey, ex post facto, comparative and correlation). ${ }^{38}$

This research used quasi experimental research. According to Darmawan, "Quasi eksperimen adalah sebuah metode yang digunakan untuk memberikan perlakuan pada sekumpulan orang, kemudian hasil dari perlakuan dievaluasi"

[^20](Quasi experimental was a method used to give a treatment to group of people, and then the result of that treatment was evaluated) ${ }^{39}$

First, the researcher selected two groups of subjects who did not have a difference of as much as possible which mean the condition, Second, the initial test or pre test in all subjects, Third, provision of treatment, Fourth, giving a final test or post test. ${ }^{40}$

This research has two variables, dependent and independent:

1. Independent Variable : Pair Work
2. Dependent Variable : Reading Comprehension

The research design is as follows:

$$
\begin{aligned}
& \mathrm{EO} \mathrm{O} \longrightarrow \mathrm{X} \longrightarrow \mathrm{O} 2 \\
& \mathrm{~K} \mathrm{O} 3 \longrightarrow \mathrm{X} \longrightarrow \mathrm{O} 4
\end{aligned}
$$

Notes:
E : Experiment class (the students who are taught use Pair Work Technique).

K : Control class (the student who is taught use conventional method).
O1 : Pre test for the experiment class.
O3 : Pre test for the control class.
X : Treatment.
${ }^{39}$ Deni Darmawan, Metode Penelitian Kuantitatif. (PT. Remaja Yosdakarya 2013). p. 241-
${ }^{40}$ Ibnu Hadjar, Dasar-dasar Metodologi Penelitian Kuantitatif Dalam Pendidikan, 336.

O2 : Post test for the experiment class after using Pair Work.
O4 : Post test for the control class after using conventional method. ${ }^{41}$
Based on the research design above, this research has two classes, which are experiment and control class as the subject. There was pre test before treatment to make the students in the same condition and to know the student' reading comprehension and post test after treatment measure the effectiveness of treatment.

The researcher uses two classes as the subject, which is XI B class as an experiment which applies Pair Work technique, and XI A as a control class which applies conventional method. Those treatments used to teach reading comprehension of the hortatory exposition.

This research used post test to conduct the data after treatment in each of class. Pre test is used in each class to make the students begin with same condition.

Here the researcher would explain the implementation of Pair Work techniques in teaching reading comprehension. It was divided into some steps:

1. The teacher made small group consist of 2 students.
2. The teacher gave the text about hortatory exposition text.
3. After this, the teacher explained of hortatory exposition text.
4. The teacher told each group to find what was known of the text in the worksheet.

[^21]5. The teacher provided the hortatory exposition text, and then the teacher chooses 1 group to read and understood the text before forward.
6. After that, the teacher gave instruction to all groups to present the text.
7. After completion of the present, the teacher provided the appropriated questions of the contents to determine the extended of understood performed with the group.
8. The teacher gives a good intonation and pronunciation to read the hortatory exposition text.
9. Contents to determine the extended of understood performed with their group.
10. Furthermore, teacher provided practice discusses hortatory exposition text.
11. The teacher gave 15 minutes for each group to another group.
12. Once completed, the group representatives collected a matter that has been done.
13. The teacher swapped the work of each group to another group.
14. After group got about exchanged, the teacher asked us to correct jointly.
15. The teacher gave students opportunity to ask question about things that are not yet understood.

## a. Data Analysis Step

Next, analyzing data was collect after the data was collect by the researcher. It begins from:

1. Collect the post test score experiment and control class.
2. Test data using t-test.

## B. Population and Sample

## 1. Population

The population is the group of people we want to generalize to. ${ }^{42}$ According to Brog, W, R., Gall, M.D, population is all the members of real or hypothetical set of people, events, or objects to which educational researchers wish to generalize the result of the search. ${ }^{43}$

According to Jack R. Fraenkel says, the population in other words is the group of interest to the researcher, the group to whom the research would like to generalize the result of the study. ${ }^{44}$

The population in this research was all of the eleventh grade students of MA Ma'arif Balong in academic year 2016/2017. They are XI A as control class and XI B as experiment class.

[^22]2. Sample

Sample is a small group of people selected to present the much larger entire population from which it is drawn. ${ }^{45}$

Sample is a collection of elements or individuals that are part of the population. The sample population is smaller than the total of population. ${ }^{46}$

A sample was a set of elements selected in some way population. Sample was smaller number of the accessible population. ${ }^{47}$ The sample was XI B as experiment class and consists of 21 students. It used to make process data collection more effective, efficient, objective conducted.

## C. Instrument of Data Collection

Instrument was tool of collecting data that was used by the researcher. According to Arikunto, Data is most important thing in the research, to get the data the researcher has to arrange the instrument and technique data that are needed to collect the data. ${ }^{48}$ In this research the instrument that was by researcher was the test. The test was used to analyze whether any significant difference about the students who were thought by pair work technique in reading comprehension and the students taught conventional method on reading comprehension at MA Ma'arif Balong.

[^23]The data in this research were the result of test. The data were taken from reading question. In this studied, the data taken from the result two group samples. The first group was students who were taught by pair work technique and second the students who were taught by conventional method.

Then the research analyzed the test result to know the difference of the students reading achievement and then interpreted it.

## D. Validity and reliability

1. Test of Validity

Heaton defines validity of a test as extent to which it measure what it was suppose measure and nothing else. In this research, the writers count the validity of writing test to measure the validity this research used product moment. According to Pearson the pattern of product moment was: ${ }^{49}$

$$
\mathrm{r}_{\mathrm{xy}}=\frac{N\left(\sum X Y\right)-\left(\sum X\right)\left(\sum Y\right)}{\sqrt{\left[n \sum_{X} 2-\left(\sum_{X} 2\right) 2\right] \cdot\left[n \sum_{y} 2-\left(\sum_{y} 2\right) 2\right]}}
$$

$\mathrm{r}_{\mathrm{xy}} \quad=$ Digit of Index Product Moment Correlation
$\sum \mathrm{x}=$ The total score X
$\sum \mathrm{y}=$ The total score Y
$\sum \mathrm{xy}=$ The total of result multiplication between score X and Y .
$\mathrm{N} \quad=$ Total responden

[^24]\[

$$
\begin{aligned}
& \mathrm{r}_{\mathrm{xy}}=\frac{N\left(\sum X Y\right)-\left(\sum X\right)\left(\sum Y\right)}{\sqrt{\left[n \sum_{X} 2-\left(\sum_{X} 2\right)^{2}\right] \cdot\left[n \sum_{y} 2-\left(\sum_{y} 2\right)^{2}\right]}} \\
& r_{x y}=\frac{21 \times 860-(118)(123)}{\sqrt{\left(21 \times 810-(118)^{2}\right)\left(21 \times 971-(123)^{2}\right)}} \\
& r_{x y}=\frac{18060-14514}{\sqrt{(17010-13924)(20391-15129)}} \\
& r_{x y}=\frac{3546}{\sqrt{(3086)(5262)}} \\
& r_{x y}=\frac{3546}{\sqrt{16238532}}=\frac{3792}{4026,7061927639}=0,94171261
\end{aligned}
$$
\]

With df or db was n-r 21-2= 19 in $5 \%$ significance the $r$ index was 0,433 . When the index of $\mathrm{r} x$ was below the r index it could be concluded that the items were not valid instruments. Thus, the item said to be valid instrument if the coefficient of correlation (rxy) was more than 0,433 .

The measure the validity of instrument of research, the researcher put the total sample 21 respondents. The researcher gave 30 multiple choice questions for this class. So, the researcher calculated the validity test from the result of multiple choice questions.

From the result calculation item validity instrument, could be concluded in the table 3.1 as follow:

Table 3.1 The Result Of Validity Calculation

| Item | "r" calculated | ' $\mathbf{r}$ ' index | Notes |
| :---: | :---: | :---: | :---: |
| 1. | 0,426 | 0,433 | Valid |
| 2. | 0,303 | 0,433 | Valid |
| 3. | 0,491 | 0,433 | Valid |
| 4. | 0,900 | 0,433 | Valid |
| 5. | 0,393 | 0,433 | Valid |
| 6. | 0,344 | 0,433 | Valid |
| 7. | 0,947 | 0,433 | Valid |
| 8. | 0,504 | 0,433 | Valid |
| 9. | 0,661 | 0,433 | Valid |
| 10. | 0,310 | 0,433 | Valid |
| 11. | 0,514 | 0,433 | Valid |
| 12. | 0,405 | 0,433 | Valid |
| 13. | 0,525 | 0,433 | Valid |
| 14. | 0,399 | 0,433 | Valid |
| 15. | 0,494 | 0,433 | Valid |
| 16. | 0,328 | 0,433 | Valid |
| 17. | 0,324 | 0,433 | Valid |
| 18. | 0,488 | 0,433 | Valid |
| 19. | 0,317 | 0,433 | Valid |
| 20. | 0,393 | 0,433 | Valid |
| 21. | 0,434 | 0,433 | Valid |
| 22. | 0,142 | 0,433 | Invalid |
| 23. | 0,254 | 0,433 | Invalid |
| 24. | 0,396 | 0,433 | Valid |
| 25. | 0,119 | 0,433 | Invalid |
| 26. | $-0,095$ | 0,433 | Invalid |
| 27. | $-0,008$ | 0,433 | Invalid |
| 28. | 0,328 | 0,433 | Valid |
| 29. | 0,484 | 0,433 | Valid |
| 30. | 0,556 | 0,433 | Valid |

## 2. Test of Reliability

Reliability was the ability of a measurement instrument to measure the same thing each time it was used. There were three important factors involved in assessed reliability, the first being stability, issue, and inter-observer consistency. ${ }^{50}$ In this research the writer would count the reliability of reading test.

The formula;

$$
\mathrm{r}_{11}=\left(\frac{n}{n-1}\right)\left(\frac{S^{2} \sum p q}{S^{2}}\right)
$$

Formula variant:

$$
S^{2}=\frac{\sum_{X} 2 \frac{\left(\sum x\right) 2}{N}}{N}
$$

Notes:
K = Number item in the instrument
$\mathrm{N} \quad=$ Number item
p = Proportion of individuals who answer an item correctly
$\mathrm{q} \quad=$ Proportion of individuals who answer an item wrong
$\mathrm{pq} \quad=\mathrm{A}$ variant of the one who is scored in a dichotomous item

$$
\mathrm{r}_{11}=\left(\frac{n}{n-1}\right)\left(\frac{S^{2} \sum p q}{S^{2}}\right)
$$

[^25]Table 3.2 The Result Of Reliability

| No. | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{X .}^{\mathbf{2}}$ | $\mathbf{Y .}^{\mathbf{2}}$ | $\mathbf{X . Y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | 5 | 7 | 25 | 49 | 35 |
| 2. | 3 | 3 | 9 | 9 | 9 |
| 3. | 10 | 10 | 100 | 100 | 100 |
| 4. | 8 | 10 | 64 | 100 | 80 |
| 5. | 2 | 4 | 4 | 16 | 8 |
| 6. | 0 | 3 | 0 | 9 | 0 |
| 7. | 9 | 10 | 81 | 100 | 90 |
| 8. | 10 | 12 | 100 | 144 | 120 |
| 9. | 8 | 7 | 64 | 49 | 56 |
| 10. | 6 | 2 | 36 | 4 | 12 |
| 11. | 5 | 6 | 25 | 36 | 30 |
| 12. | 8 | 9 | 64 | 81 | 72 |
| 13. | 7 | 9 | 49 | 81 | 63 |
| 14. | 5 | 3 | 25 | 9 | 15 |
| 15. | 5 | 4 | 25 | 16 | 20 |
| 16. | 3 | 3 | 9 | 9 | 9 |
| 17. | 6 | 5 | 36 | 25 | 30 |
| 18. | 7 | 8 | 49 | 64 | 56 |
| 19. | 4 | 6 | 16 | 36 | 24 |
| 20. | 5 | 5 | 25 | 25 | 25 |
| 21. | 2 | 3 | 4 | 9 | 6 |
| $\mathbf{N}=\mathbf{2 1}$ | $\mathbf{1 1 8}$ | $\mathbf{1 2 3}$ | $\mathbf{8 1 0}$ | $\mathbf{9 7 1}$ | $\mathbf{8 6 0}$ |
| STATISTIK | $\Sigma \mathbf{X}$ | $\sum \mathbf{Y}$ | $\sum \boldsymbol{X}^{\mathbf{2}}$ | $\sum \boldsymbol{Y}^{\mathbf{2}}$ | $\sum \mathbf{X Y}$ |

$$
\begin{aligned}
r_{i}=\frac{2 \cdot r_{b}}{1+r_{b}} & =\frac{2 \times 0,94171261}{1+0,94171261}=\frac{1,88342522}{1,94171261} \\
& =0,96998145(0,969)
\end{aligned}
$$

Reliability of the results above calculations was the value of the variable instrument reliability was 0,969 . And the test was reliable because the index of reliability test was 0,969 , it was higher than r index that showed 0,433.

## E. Normality and Homogeneity

1. Normality

The simplest test for normality was to graph the frequency distribution data. Given the simplify of it; then testing the normality of the data was high dependent on the ability to examine data in plotting the data, if the amount of data were many and deployment were not $100 \%$ normal (not perfect), then the conclusions drawn were likely wrong. To avoid this mistake, it was better used some formulas that have been tested truth that was KolmogorovSminorv. Each of two populations being compared must follow a normal distribution. This could be tested by this.
2. Homogeneity

Homogeneity test was needed to do before found a different significant of data. This test purposes to known whether the data of research homogeny or heterogenic, so by this could said that the variant of data of research was homogeny. The researcher used Harley formula to the homogeneity of data.

The formula:

$$
F(\max )=\frac{\text { Var max }}{\text { Var min }}
$$

## F. Technique Of Data Collection

The use of the right technique and instrument in collecting data is important to take the objective data. There are five kinds of the data collection
techniques, observation technique, communication technique, measurement technique, sosiometris technique, and documentation technique. ${ }^{51}$

This research uses measurement, communication and documentation for technique of data collection.

1. Measurement test

Measurement technique is used to conduct the quantitative data. This research uses test. It is used to measure the achievement after treatment conventional method in control class and through technique in experiment class. The test used to know whether the teaching and learning process is success or not.

## 2. Communication

Communication technique is the way to collect the data from contact or personal connection between collector and source of the data. ${ }^{52}$ The direct communication technique is interview. The interview here was used to data dealing to know the information from respondent.

## 3. Documentation

Documentation technique is the way to collect data by photos estate written, ancient inscription magazine. ${ }^{53}$ Here documentation was used to find out the data dealing with the name of subject, the personnel of the school,

[^26]map, Operation Structure Organization and research letter from MA Ma'arif Balong.

## G. Technique of data analysis

In this research, the researcher used statistical data analysis technique to know the different score between the students' reading comprehension before and after being taught by group work technique. This technique of data analysis belongs to quantitative data analysis and the data were analysis statistically by using T-test.

According to Retno Widyaningrum, the formula of T-test is:

1. The formula of mean variable 1 and variable 2

$$
M_{1}=\frac{\sum f X}{n_{1}} \quad M_{2}=\frac{\sum f Y}{n_{2}}
$$

2. Score of Standard Deviation of variable X and variable Y

$$
S D_{1}=\sqrt[i]{\frac{\sum f x^{\prime 2}}{N_{1}}}-\left(\frac{\sum f x^{\prime}}{N_{1}}\right)^{2} \quad S D_{2}=\sqrt[i]{\frac{\sum f x^{\prime 2}}{N_{2}}}-\left(\frac{\sum f x^{\prime}}{N_{2}}\right)^{2}
$$

3. Standard error the mean of variable X and variable Y

$$
S E_{M 1}=\frac{S D_{1}}{\sqrt{N_{1-1}}} \quad \quad S E M_{2}=\frac{S D_{2}}{\sqrt{N_{2-1}}}
$$

4. Score Standard the mean of variable X and variable Y

$$
S E_{M 1-M 2}=\sqrt{S E_{M_{1}}^{2}+S E_{M_{2}}{ }^{2}}
$$

5. The formula T-test

$$
t_{0}=\frac{M_{1}-M_{2}}{S E_{M_{1}-M_{2}}}
$$

6. Interpretation

Interpretation was consulted the result between $t_{t}(t$ table $)$ and $t_{0}(t$ observation). If $t_{0}$ higher than $t_{t}$, so, $H_{0}$ was refuse and Ha received. If $t_{0}$ smaller than $t_{t}, H_{0}$ received and Ha was refused.

Notes:

| M1 | $=$ Mean of variable x |
| :--- | :--- |
| M2 | $=$ Mean of variable y |

$\Sigma \mathrm{fX} \quad=$ Sum of frequency and x
$\sum \mathrm{fY} \quad=$ Sum of frequency and y
$\mathrm{Nx} \quad=$ The number of sample variable x
Ny $\quad=$ The number of sample variable $y$
$\mathrm{SD}_{1} \quad=$ Standard deviation of variable x
$\mathrm{SD}_{2} \quad=$ Standard deviation of variable y
$S E_{M 1} \quad=$ Standard error of mean x
$S E_{M 2} \quad=$ Standard error of mean y
$S E_{M 1-\mathrm{M} 2} \quad=$ Standard error between the mean from variable I and II
$\mathrm{t}_{0} \quad=\mathrm{T}$-test ${ }^{54}$
${ }^{54}$ Retno Widyaningrum, Statistik Pendidikan (Edisi Revisi). (Ponorogo: STAIN Ponorogo Press, 2014), 159.

## CHAPTER IV

## RESEACH RESULT

## A. Data Description

## 1. Procedure of Experiment

This research used experiment research which made one class as the sample; there was XI B as an experiment class. The number of experiment class was 21 students.

The researcher gave multiple choice tests to know reading comprehension of the students before and after being taught by using Pair Work Technique.

On March $06^{\text {th }} 2017$, the researcher came to school and requested permission from the principle to the conduct research towards headmaster of MA Ma'arif Balong. The researcher conducts to observe and discuss with the English teacher of MA Ma'arif Balong about syllabus, lesson plan, and the material that was used.

On April $21^{\text {st }} 2017$, the researcher gave the pre test on hortatory text and taught English reading without treatment. The researcher gave pretest for the students to answer the multiple choice question in hortatory text based on question. The students were gave pretest to made them in some condition homogeneity before beginning the research. It used for about 35 minutes.

On April $25^{\text {th }} 2017$, the researcher gave first treatment for the students with Pair Work technique. The material was hortatory exposition text. The students must apply the Pair Work technique to comprehend the text. On May $02^{\text {nd }} 2017$, the researcher gave second treatment that was relevant with the material of teaching learning. The material was hortatory exposition text too. But has different topic with the first treatment.

On May $05^{\text {th }} 2017$, the researcher gave a post test to the students with multiple choice questions to base on Pair Work in from hortatory text. It used to measure whether the Pair Work technique was success or not in teaching reading comprehension. The posttest and pretest took hortatory exposition text, but different topic and items. It used to know the true result whether and method was effective or not. The test items were constructed based on the indicators and the material which are suitable with the themes and sub themes suggested in English book for the eleventh grade of senior high school. The pretest and posttest was objective test which consist 30 items and all of item were multiple choices. The total scores are 100 and the value of each correct item was.

The Pair Work were method which never to be applied for the students before in teaching and learning process. This method made the students to comprehend the text easily because this method applied with other member of group. The result most of the students did not interest with the text when do the pretest.

This research needed much time to introduce. To apply and solve the problem in comprehended the text. So, the students could more active and interested with the method.

Table 4.1; The Result Research Time

| Date | Activities |
| :--- | :--- |
| April, $21^{\text {st }} 2017$ | Pre test |
| April, $25^{\text {th }} 2017$ | First treatment with Pair Work Technique |
| May, $02^{\text {nd }} 2017$ | Second treatment with Pair Work |
| May, $05^{\text {th }} 2017$ | Post test |

## 2. Procedure of Control

This research was taken in XI A as a control class which applied reading aloud strategy. It is an instructional strategy that has been shown to be effective to improve a reader's understanding and student's ability to recall information. In other words, the reader is more likely to learn, and to learn more, of the material students is reading.

The number of XI A class was 21 students. There were four meeting in the procedure control class. The first meeting pretest was held on April, $21^{\text {st }}$ 2017, first and second treatment was held on April, $25^{\text {th }} 2017$ and May, $02^{\text {nd }}$ 2017. Finally posttest was held on May, $05^{\text {th }} 2017$.

The material which was taught to the students was same with experiment class. That was one of principles in the experiment research different treatment with the same material.

The reading aloud strategy has been empirically shown to be able to improve students' reading comprehension. That strategy follows three steps:

Pre reading, While Reading and Post Reading. In Pre reading, the entire chapter-skim through it all so the students were going to prediction what will happened from the text. While reading, students read the text in front of class and students made some question or difficult words based on the text and predict what will happen next about students read. Think about meaning and relate this to other things students known about this and similar topics. Post reading, once the students have finished reading, check back the text, and note the things that missed out. And the teacher gave test to known the students' reading comprehension.

In this research, it used participate research with the teacher. The researcher explains the material which was helped by English teacher.

The teaching learning process used to conventional method has some steps, they are:

1. The teacher gives some hortatory text to students, predicts and understood the text.
2. The teacher asked the students to read aloud in front of with comprehends.
3. After this, the teacher asked the students to find some difficult words and understand the text.
4. The teacher asked the students to answer their difficult words.
5. After that, the teacher gives instruction to students to find generic structure of the text with their language and comprehends.
6. After finished, the teacher gave test to the students.
7. The teacher explained about hortatory exposition text material.

To know whether Pair Work technique was effective or not in teaching reading comprehension, the researcher would describe the data which was conducted in MA Ma'arif Balong. The data were pretest and posttest from experiment class and control.

The data conducted with two groups, those were pretest and posttest of reading comprehension from experiment group (variable x ) and posttest of reading comprehension from control group (variable y).

Table 4.2: The Result Data of Pretest in Experiment Class

| No. | Name of students | Score |
| :---: | :--- | :---: |
| 1. | Abilawa Garda Paksi | 35 |
| 2. | Adam Azizi | 45 |
| 3. | Afif Ikhsanul H. | 25 |
| 4. | Ahmat Irfan Efendi | 30 |
| 5. | Anwar Rifa'i | 25 |
| 6. | Danang Prabowo | 25 |
| 7. | Elva Nur Ardianti | 50 |
| 8. | Kharisma Novita Sari | 40 |
| 9. | Imam Tamami | 30 |
| 10. | Linda Agustina Pratiwi | 55 |
| 11. | Lusita Dwi Erviani | 45 |
| 12. | Muhammad Muhaddir | 30 |
| 13. | Nur Chamid | 10 |
| 14. | Pamuji | 35 |
| 15. | Regita Novita Sari | 35 |
| 16. | Sindy Sekar Ayu Ningrum | 40 |
| 17. | Siti Maratun Solikhah | 50 |
| 18. | Suci Nur Prihatin | 20 |
| 19. | Rizqunal Kafi | 15 |
| 20. | Martina Dwi Nur Halimah | 65 |
| 21. | Siti Nashrul Azizah | 25 |
|  |  |  |

Table 4.3: The Result Data of Pretest in Control Class

| No. | Name of students | Score |
| :---: | :--- | :---: |
| 1. | Abdul Rokhim | 10 |
| 2. | Aldian Aldi Saputra | 25 |
| 3. | Bella Mellathi | 30 |
| 4. | Cintia Kusumawardani | 25 |
| 5. | Dewi Ratnasari | 40 |
| 6. | Ferdin Wahyu Ardiansyach | 35 |
| 7. | Fika Tri Nurdianti | 30 |
| 8. | Habib Nur Sidik | 30 |
| 9. | Muji Utomo | 10 |
| 10. | Reni Purniawati | 25 |
| 11. | Retno Ayu Yulianingtyas | 30 |
| 12. | Riski Rio Maulana | 35 |
| 13. | Rizalul Fikri | 35 |
| 14. | Wiwik Puji Lestari | 45 |
| 15. | Mita Ainul Afifah | 25 |
| 16. | Sigit Aji Saputro | 20 |
| 17. | Fitria Setyaningrum | 30 |
| 18. | Shinta Anisatul Muthi'ah | 50 |
| 19. | Siska Diah Farizatul Ummah | 45 |
| 20. | Ida Zubaidah | 45 |
| 21. | Friska Cahyanti | 35 |
|  |  |  |

Table 4.4: The Result Data of Posttest in Experimental Group (Variable X)

| No. | Name of students | Score |
| :---: | :--- | :---: |
| 1. | Abilawa Garda Paksi | 80 |
| 2. | Adam Azizi | 80 |
| 3. | Afif Ikhsanul H. | 80 |
| 4. | Ahmat Irfan Efendi | 75 |
| 5. | Anwar Rifa'I | 65 |
| 6. | Danang Prabowo | 70 |
| 7. | Elva Nur Ardianti | 80 |
| 8. | Kharisma Novita Sari | 80 |
| 9. | Imam Tamami | 80 |
| 10. | Linda Agustina Pratiwi | 80 |
| 11. | Lusita Dwi Erviani | 80 |
| 12. | Muhammad Muhaddir | 80 |
| 13. | Nur Chamid | 80 |
| 14. | Pamuji | 65 |
| 15. | Regita Novita Sari | 80 |
| 16. | Sindy Sekar Ayu Ningrum | 80 |
| 17. | Siti Maratun Solikhah | 85 |
| 18. | Suci Nur Prihatin | 80 |
| 19. | Rizqunal Kafi | 80 |
| 20. | Martina Dwi Nur Halimah | 85 |
| 21. | Siti Nashrul Azizah | 65 |
|  |  |  |

Table 4.5: The Result Data of Posttest in Control Group

## (Variable Y)

| No. | Name of students | Score |
| :---: | :--- | :---: |
| 1. | Abdul Rokhim | 20 |
| 2. | Aldian Aldi Saputra | 50 |
| 3. | Bella Mellathi | 45 |
| 4. | Cintia Kusumawardani | 70 |
| 5. | Dewi Ratnasari | 60 |
| 6. | Ferdin Wahyu Ardiansyach | 65 |
| 7. | Fika Tri Nurdianti | 60 |
| 8. | Habib Nur Sidik | 25 |
| 9. | Muji Utomo | 80 |
| 10. | Reni Purniawati | 50 |
| 11. | Retno Ayu Yulianingtyas | 55 |
| 12. | Riski Rio Maulana | 85 |
| 13. | Rizalul Fikri | 85 |
| 14. | Wiwik Puji Lestari | 75 |
| 15. | Mita Ainul Afifah | 85 |
| 16. | Sigit Aji Saputro | 45 |
| 17. | Fitria Setyaningrum | 60 |
| 18. | Shinta Anisatul Muthi'ah | 50 |
| 19. | Siska Diah Farizatul Ummah | 40 |
| 20. | Ida Zubaidah | 65 |
| 21. | Friska Cahyanti | 55 |
|  |  |  |

## B. Data Analysis

The data have been collected variables were tested by " test" comparison formula, which was to find out where there are significant difference between the two variables are required, first was to calculate the mean, standard deviations, and standard error from each of the data (variables). The data then should fulfill several assumption before it used for testing hypothesis.

1. Assumption test
a. Normality

Normality test was conducted to known whether the data distribution was normal distribution or not. For this test, it would be proposed the hypothesis as follow:

$$
\begin{aligned}
& \mathrm{H}_{0} \quad=\text { the data was not normal distribution. } \\
& \mathrm{H}_{\mathrm{a}} \quad=\text { the data was normal distribution. }
\end{aligned}
$$

Table 4.6: The Result Normality of Data and Calculation of the Students

## Reading Comprehension That Taught By Pair Work Technique

(Variable X)

| X | F | f.x | $\mathrm{x}^{2}$ | f. ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: |
| 85 | 2 | 170 | 7225 | 14450 |
| 80 | 12 | 960 | 6400 | 76800 |
| 75 | 1 | 75 | 5625 | 5625 |
| 70 | 1 | 70 | 4900 | 4900 |
| 65 | 3 | 195 | 4225 | 12675 |
| TOTAL | \F21 | $\sum$ f.x 1470 |  | $\sum \mathrm{f} . \mathbf{x}^{\mathbf{2}} \mathbf{1 1 4 4 5 0}$ |

$$
\begin{aligned}
\mathrm{Mx} & =\frac{\sum f x}{n} \\
& =\frac{1470}{21} \\
& =70 \\
\mathrm{SDx} & =\sqrt{\frac{\sum f x^{2}}{n}-\left(\frac{\sum f x}{n}\right)^{2}} \\
& =\sqrt{\frac{114450}{21}}-\left(\frac{1470}{21}\right)^{2} \\
& =\sqrt{5450-(70)^{2}} \\
& =\sqrt{5450-4900} \\
& =\sqrt{550} \\
& =23,4520788
\end{aligned}
$$

Table 4.7: The Result Normality of Data and Calculation of the Students

## Reading Comprehension That Taught By Pair Work Technique

(Variable X) With the Kolmogorov - Sminorv Formula.

| $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F k b}$ | $\mathbf{f} / \mathbf{n}$ | $\mathbf{F k b} / \mathbf{n}$ | $\mathbf{Z}$ | $\mathbf{p} \leq \mathbf{z}$ | $\mathbf{A}_{\mathbf{2}}$ | $\mathbf{A}_{\mathbf{1}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 85 | 2 | 21 | 0,09 | 1 | 0,639 | 0,7357 | 0,264 | $-0,174$ |
| 80 | 12 | 18 | 0,57 | 0,57 | 0,426 | 0,6628 | $-0,092$ | 0,662 |
| 75 | 1 | 6 | 0,04 | 0,04 | 0,213 | 0,4168 | $-0,376$ | 0,416 |
| 70 | 1 | 5 | 0,04 | 0,04 | $-0,398$ | 0,0120 | 0,028 | 0,012 |
| 65 | 3 | 3 | 0,14 | 0,14 | $-0,213$ | 0,0080 | 0,132 | 0,008 |

This study, research used Kolmogorov - Sminorv resulted:
$\mathrm{D}_{(0,05,21)}$ from table 1,36
$\mathrm{D}_{(0,05,21)}=1,36 / \sqrt{n}=1,36 / \sqrt{21}=0,296776331041899(0,297)$
Ho was accepted if $\mathrm{a}_{1} \max \leq \mathrm{D}_{\text {table }}$ was 0,297
Ha was rejected if $\mathrm{a}_{1} \max >\mathrm{D}_{\text {table }}$ was 0,297
Because the maximum count value $a_{1}$ was 0,662 where the figure was smaller than the table, so the decision was to accept Ho, which mean the data was normality distributed.

Table 4.8: The Result Normality of Data and Calculation of the Average Standard Aviation of the Students Reading Comprehension That

Who Are Not Taught By Pair Work Technique (Variable Y)

| $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{f . y}$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{f . y}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: |
| 85 | 3 | 255 | 7225 | 21675 |
| 80 | 1 | 80 | 6400 | 12800 |
| 75 | 1 | 75 | 5625 | 11250 |
| 70 | 1 | 70 | 4900 | 9800 |
| 65 | 2 | 130 | 4225 | 8450 |
| 60 | 3 | 180 | 3600 | 21600 |
| 55 | 2 | 110 | 3025 | 6050 |
| 50 | 3 | 150 | 2500 | 7500 |
| 45 | 2 | 90 | 2025 | 4050 |
| 40 | 1 | 40 | 1600 | 1600 |
| 25 | 1 | 25 | 625 | 625 |
| 20 | 1 | 40 | 400 | 800 |
| TOTAL | $\sum \mathbf{F 2 1}$ | $\sum \mathbf{f y ~ 1 2 4 5}$ | $\sum \mathbf{y}^{\mathbf{2}} \mathbf{4 2 1 5 0}$ | $\sum \mathbf{f . \mathbf { y } ^ { \mathbf { 2 } } \mathbf { 1 0 6 2 0 0 }}$ |

$$
\begin{aligned}
\text { My } & =\frac{\sum f y}{n} \\
& =\frac{1245}{21} \\
& =59,2
\end{aligned}
$$

$$
\mathrm{SDy}=\sqrt{\frac{\sum f y^{2}}{n}}-\left(\frac{\sum f y}{n}\right)^{2}
$$

$$
=\sqrt{\frac{106200}{21}}-\left(\frac{1245}{21}\right)^{2}
$$

$$
=\sqrt{5057,14-(59,2)^{2}}
$$

$$
=\sqrt{5057,14-3504,64}
$$

$$
=\sqrt{1552.5}
$$

$$
=39.4017766
$$

Table 4.9: The Result Normality of Data and Calculation of the Students
Reading Comprehension That Who Are Not Taught By Pair Work
Technique (Variable Y) With the Kolmogorov - Sminorv Formula.

| $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F k b}$ | $\mathbf{f} / \mathbf{n}$ | $\mathbf{F k b} / \mathbf{n}$ | $\mathbf{Z}$ | $\mathbf{p} \leq \mathbf{z}$ | $\mathbf{A}_{\mathbf{2}}$ | $\mathbf{A}_{\mathbf{1}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 85 | 3 | 21 | 0,14 | 1 | 1,263 | 0,8962 | 0,103 | 0,037 |
| 80 | 1 | 18 | 0,04 | 0,85 | 1,018 | 0,8438 | 0,006 | 0,034 |
| 75 | 1 | 17 | 0,04 | 0,80 | 0,773 | 0,7881 | 0,011 | 0,029 |
| 70 | 1 | 16 | 0,04 | 0,76 | 0,529 | 0,7794 | $-0,019$ | 0,059 |
| 65 | 2 | 14 | 0,09 | 0,66 | 0,284 | 0,6103 | $-0,040$ | 0,13 |
| 60 | 3 | 11 | 0,14 | 0,52 | 0,039 | 0,512 | 0,008 | 0,132 |
| 55 | 2 | 9 | 0,09 | 0,42 | $-0,205$ | 0,4207 | $-0,000$ | 0,09 |
| 50 | 3 | 6 | 0,14 | 0,28 | $-0,450$ | 0,3264 | $-0,046$ | 0,186 |
| 45 | 2 | 4 | 0,09 | 0,19 | $-0,695$ | 0,2451 | $-0,055$ | 0,145 |
| 40 | 1 | 3 | 0,04 | 0,14 | $-0,940$ | 0,1736 | $-0,033$ | 0,073 |
| 25 | 1 | 2 | 0,04 | 0,09 | $-1,675$ | 0,0475 | 0,042 | $-0,002$ |
| 20 | 1 | 1 | 0,04 | 0,04 | $-1,920$ | 0,0274 | 0,012 | 0,028 |

This study, research used Kolmogorov - Sminorv resulted:
$D_{(0,05,21)}$ from table 1,36
$\mathrm{D}_{(0,05,21)}=1,36 / \sqrt{n}=1,36 / \sqrt{21}=0,296776331041899(0,297)$
Ho was accepted if $\mathrm{a}_{1} \max \leq \mathrm{D}_{\text {table }}$ was 0,297
Ha was rejected if $\mathrm{a}_{1} \max >\mathrm{D}_{\text {table }}$ was 0,297
Because maximum count value $a_{1}$ was 0,186 where the figure was smaller than the table, so the decision was to accept Ho, which mean the data was normality distributed.
b. Homogeneity

$$
F(\max )=\frac{\text { Var } \max }{\text { Var min }}
$$

a. Homogeneity in Experiment Class

1. Made frequency distribution table.

Table 4.10: The Result Homogeneity Test before Using Pair Work

## Technique (Pretest)

| $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F x}$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{F x}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: |
| 65 | 1 | 65 | 4225 | 4225 |
| 55 | 1 | 55 | 3025 | 3025 |
| 50 | 2 | 100 | 2500 | 5000 |
| 45 | 2 | 90 | 2025 | 4050 |
| 40 | 2 | 80 | 1600 | 3200 |
| 35 | 3 | 105 | 1225 | 3675 |
| 30 | 3 | 90 | 900 | 2700 |
| 25 | 4 | 100 | 625 | 2500 |
| 20 | 1 | 20 | 400 | 400 |
| 15 | 1 | 15 | 225 | 225 |
| 10 | 1 | 10 | 100 | 100 |
| Total | $\sum \mathbf{F 2 1}$ | $\sum \mathbf{F x} \mathbf{7 3 0}$ | - | $\sum \mathbf{f x}^{\mathbf{2} 29100}$ |

Table 4.11: The Result Homogeneity Test after Using Pair Work Technique (Posttest)

| $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F y}$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{f y}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: |
| 85 | 2 | 170 | 7225 | 14450 |
| 80 | 12 | 960 | 6400 | 76800 |
| 75 | 1 | 75 | 5625 | 5625 |
| 70 | 1 | 70 | 4900 | 4900 |
| 65 | 3 | 195 | 4225 | 12675 |
| Total | $\sum \mathbf{F 2 1}$ | $\sum \mathbf{F y} \mathbf{1 7 9 0}$ | - | $\sum \mathbf{f y}^{\mathbf{2} 114450}$ |

2. Determining SDx

$$
\begin{aligned}
\mathrm{SDx} & =\sqrt{\frac{\sum f x^{2}}{n}-\left(\frac{\sum f x}{n}\right)^{2}}=\sqrt{\frac{29100}{21}-\frac{730}{21}} \\
& =\sqrt{1385,71429-34,7619048} \\
& =\sqrt{1350,95239}=36,7553042 \\
\mathrm{SDy} & =\sqrt{\frac{\sum f y^{2}}{n}-\left(\frac{\sum f y}{n}\right)^{2}}=\sqrt{\frac{114450}{21}-\frac{1790}{21}} \\
& =\sqrt{5450-85,2380952} \\
& =\sqrt{5364,7619}=73,2445349
\end{aligned}
$$

3. Use Harley's Formula

$$
\begin{aligned}
F(\max ) & =\frac{\text { Var } \max }{\text { Var } \min }=\frac{36,7553042^{2}}{73,2445349^{2}} \\
& =\frac{1350,95239}{5364,76189}=0,25181964
\end{aligned}
$$

## 4. Determining Hypothesis

Based on explanation above the researcher determined the hypothesis as follow:

Ho: the data was homogeneity
Ha: the data was not homogeneity
Look at the F (max) table with the standard significant $1 \%$ with $\mathrm{db}=$ $(n-1: k)=(21-1: 2)=(20: 2)$ : so, it could be obtained 3,64 .

Criteria:
Reject Ha if $\mathrm{F}(\max )$ value $>\mathrm{F}(\max )$ table
Accepted Ho if F (max) value < F (max) table
$\mathrm{F}(\max )$ value $=0,25$
$\mathrm{F}(\max )$ table $=3,64$
So the conclusion was accepted Ho. It means the data of experiment class was homogeny.
b. Homogeneity in Control Class

1. Made frequency distribution table.

Table 4.12: The Result Homogeneity Test before Using Pair Work
Technique (Pretest)

| $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F x}$ | $\mathbf{x}^{\mathbf{2}}$ | $\mathbf{F x}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: |
| 65 | 1 | 65 | 4225 | 4225 |
| 5 s 0 | 2 | 100 | 2500 | 5000 |
| 45 | 1 | 45 | 2025 | 2025 |
| 40 | 4 | 160 | 1600 | 6400 |
| 35 | 5 | 175 | 1225 | 6125 |
| 30 | 4 | 120 | 900 | 3600 |
| 25 | 2 | 50 | 625 | 1600 |
| 20 | 2 | 40 | 400 | 800 |
| Total | $\sum \mathbf{F 2 1}$ | $\sum \mathbf{F x} \mathbf{7 5 5}$ | - | $\sum \mathbf{f x}^{\mathbf{2 9} 29775}$ |

Table 4.13: The Result Homogeneity Test Not Using Pair Work
Technique (Posttest)

| $\mathbf{X}$ | $\mathbf{F}$ | $\mathbf{F y}$ | $\mathbf{y}^{\mathbf{2}}$ | $\mathbf{f y}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: |
| 85 | 3 | 255 | 7225 | 21675 |
| 80 | 1 | 80 | 6400 | 12800 |
| 75 | 1 | 75 | 5625 | 11250 |
| 70 | 1 | 70 | 4900 | 9800 |
| 65 | 2 | 130 | 4225 | 8450 |
| 60 | 3 | 180 | 3600 | 21600 |
| 55 | 2 | 110 | 3025 | 6050 |
| 50 | 3 | 150 | 2500 | 7500 |
| 45 | 2 | 90 | 2025 | 4050 |
| 40 | 1 | 40 | 1600 | 1600 |
| 25 | 1 | 25 | 625 | 625 |
| 20 | 1 | 40 | 400 | 800 |
| TOTAL | $\sum \mathbf{F 2 1}$ | $\sum \mathbf{F y ~ 1 2 4 5}$ | - | $\sum \mathbf{f y}^{\mathbf{2} 106200}$ |

2. Determining SDx

$$
\begin{aligned}
\mathrm{SDx} & =\sqrt{\frac{\Sigma f x^{2}}{n}-\left(\frac{\sum f x}{n}\right)^{2}}=\sqrt{\frac{29775}{21}-\frac{755}{21}} \\
& =\sqrt{1417,85714-35,952381} \\
& =\sqrt{1381,90476}=37,1739796 \\
\mathrm{SDy} & =\sqrt{\frac{\Sigma f y^{2}}{n}-\left(\frac{\sum f y}{n}\right)^{2}}=\sqrt{\frac{106200}{21}-\frac{1245}{21}} \\
& =\sqrt{5057,14286-59,2857143} \\
& =\sqrt{4997,85715}=70,6955243
\end{aligned}
$$

3. Use Harley Formula

$$
F(\max )=\frac{\text { Var } \max }{\text { Var } \min }=\frac{37,1739796^{2}}{70,6955243^{2}}
$$

$$
=\frac{1381,90476}{4997,85716}=0,276649945
$$

## 4. Determining Hypothesis

Based on explanation above the researcher determines the hypothesis as follow:

Ho: the data was homogeneity
Ha: the data was not homogeneity
Look at the F (max) table with the standard significant $1 \%$ with $\mathrm{db}=$ $(n-1: k)=(21-1: 2)=(20: 2)$ : so, it could be obtained 3,80

## Criteria:

Reject Ha if $\mathrm{F}(\max )$ value $>\mathrm{F}(\max )$ table
Accepted Ho if F (max) value < F (max) table
$\mathrm{F}(\max )$ value $=0,27$
$\mathrm{F}(\max )$ table $=3,80$
So the conclusion was accepted Ho. It means the data of experiment class was homogeny.

## C. T-test

As the step to calculate the " $t$ " test formula, the first step was calculated the reading comprehension score. In this table, the researcher processed the student's ability that taught by pair work technique. From 21 with different score, it was classified based on score variance ( $x^{\prime}$ ), from 65-85. then the researcher calculated the frequency of score (f) and the midpoint (x) of students reading comprehension that taught by pair work technique.

Table 4.14: The Result Computation of Students' Reading Comprehension
Taught By Pair Work Technique

| Score (x) | $\mathbf{F}$ | $\mathbf{x}^{\prime}$ | $\mathbf{f . x ^ { \prime }}$ | $\mathbf{( x '}^{\mathbf{2}}$ | $\mathbf{f . ( \mathbf { x } ^ { \prime } ) ^ { \mathbf { 2 } }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $81-85$ | 2 | +1 | 5 | 1 | 5 |
| $76-80$ | 12 | 0 | 0 | 0 | 0 |
| $71-75$ | 1 | -1 | -1 | 1 | 1 |
| $66-70$ | 1 | -2 | -2 | 2 | 2 |
| $61-65$ | 3 | -3 | -3 | 3 | 12 |
| Total $\left(\sum \mathbf{~}\right.$ | $\mathbf{2 1}$ | - | $\mathbf{- 1 0}$ | $\mathbf{7}$ | $\mathbf{2 0}$ |

Next table was about students' reading comprehension that was not taught by pair work technique. This table the researcher classified the variance score (Y) from 20 until 85, calculated the frequency (f) and midpoint (y) of students' reading comprehension that was not taught by pair work technique.

Table 4.15: The Result Computation of Students' Reading Comprehension That

## Is Not Taught By Pair Work Technique

| Score (y) | $\mathbf{F}$ | $\mathbf{y}^{\prime}$ | $\mathbf{f . y}^{\mathbf{}^{\prime}}$ | $\mathbf{y}^{\mathbf{\prime}}{ }^{\mathbf{2}}$ | $\mathbf{f . y}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $81-85$ | 3 | +5 | 15 | 25 | 75 |
| $76-80$ | 1 | +4 | 4 | 16 | 16 |
| $71-75$ | 1 | +3 | 3 | 9 | 9 |
| $66-70$ | 1 | +2 | 2 | 4 | 4 |
| $61-65$ | 2 | +1 | 2 | 1 | 2 |
| $56-60$ | 3 | 0 | 0 | 0 | 0 |
| $51-55$ | 2 | -1 | -2 | 1 | 2 |
| $46-50$ | 3 | -2 | -6 | 4 | 12 |
| $41-45$ | 2 | -3 | -6 | 9 | 18 |
| $36-40$ | 1 | -4 | -4 | 16 | 16 |
| $21-35$ | 1 | -5 | -5 | 25 | 25 |
| $16-20$ | 1 | -6 | -6 | 36 | 36 |
| Total $\left(\sum\right.$ ) | $\mathbf{2 1}$ | - | $\mathbf{- 3}$ | $\mathbf{1 4 6}$ | $\mathbf{2 1 5}$ |

From both tables above, the researcher compute the mean score of students' reading comprehension that taught by pair work technique (X) and whose were not taught by pair work technique (Y).

$$
\begin{aligned}
\mathrm{Mx} & =\mathrm{M}^{\prime}+\mathrm{i}\left(\frac{\sum f x^{\prime}}{N}\right)^{2} \\
& =78+4\left(\frac{-10}{21}\right)^{2} \\
& =78+(-4,4761905)^{2} \\
& =78+20,0362814=98,3
\end{aligned}
$$

$$
\begin{aligned}
\mathrm{My} & =\mathrm{M}^{\prime}+\mathrm{i}\left(\frac{\sum f y^{\prime}}{N}\right)^{2} \\
& =60+\mathrm{i}\left(\frac{-3}{21}\right)^{2}
\end{aligned}
$$

$$
\begin{aligned}
& =60+(-1,5714281)^{2} \\
& =60+2,46938627=62,4
\end{aligned}
$$

$$
\begin{aligned}
S D_{x} & =\sqrt[i]{\frac{\sum f x^{\prime 2}}{n_{1}}-\left(\frac{\sum f x^{\prime}}{n_{1}}\right)^{2}} \\
& =4 \sqrt{\frac{20}{21}-\left[\frac{-10^{2}}{21}\right]^{2}} \\
& =4 \sqrt{0,86956522-(-0,4347826)^{2}} \\
& =4 \sqrt{0,86956522-0,18903591} \\
& =4 \sqrt{0,68052931} \\
& =4.0 .824942=3,299768
\end{aligned}
$$

$$
\begin{aligned}
S D_{y} & =\sqrt[i]{\frac{\sum f y^{\prime 2}}{N_{1}}-\left(\frac{\sum f y^{\prime}}{N_{1}}\right)^{2}} \\
& =11 \sqrt{\frac{215}{21}-\left[\frac{-3^{2}}{21}\right]^{2}} \\
& =11 \sqrt{10,2380952-(-0,1428571)^{2}} \\
& =11 \sqrt{10,2380952-0,02040815} \\
& =11 \sqrt{10,2176871} \\
& =11.3,19651171=35,1616288
\end{aligned}
$$

$$
S E_{M x} \quad=\frac{S D_{x}}{\sqrt{n 1-1}}
$$

$$
\begin{aligned}
& =\frac{3,299768}{\sqrt{21-1}} \\
& =\frac{3,299768}{\sqrt{20}} \\
& =\frac{3,299768}{4,47213595}=0,73785056
\end{aligned}
$$

$$
\begin{aligned}
S E_{M y} \quad & =\frac{S D_{y}}{\sqrt{n 2-1}} \\
& =\frac{35,1616288}{\sqrt{21-1}} \\
& =\frac{35,1616288}{\sqrt{20}} \\
& =\frac{35,1616288}{4,47213595}=7,86237923
\end{aligned}
$$

$$
S E_{M I^{-} M 2}=\sqrt{S E_{M_{1}}^{2}+S E_{M_{2}}{ }^{2}}
$$

$$
=\sqrt{0,73785056^{2}+7,86237923^{2}}
$$

$$
=\sqrt{0,54442345+61,8170072}
$$

$$
=\sqrt{62,3614307}=7,8969254
$$

From the several computations above, the last part was computed $\mathrm{t}_{0}$ test. It was used to known $t_{0}$ score that was used to compare with $\mathrm{t}_{0}$ answer statement of the problem and hypothesis.

The computation of $t_{0}$ score:

$$
\begin{aligned}
\mathrm{t}_{0} & =\frac{M_{x}-M_{y}}{S E_{M_{x}-M_{y}}} \\
& =\frac{98,3-62,4}{7,8969254} \\
& =\frac{35,9}{7,8969254} \\
& =4,54607308 \\
& =4,546
\end{aligned}
$$

## D. Discussion

Discussion was used to answer the hypothesis that:
Nunan says, "Reading is fluent process combining information from a text and their own background knowledge to build meaning. The goal of reading comprehension".

In the same line Caroline T. Linse states that reading is a set of skills that involves making sense and delivering meaning from printed words.

From the explanation above, it can be inferred that reading is having a goal to create the students understanding of the meaning from any literatures.

Pair Work is one of the interaction patterns used in the modern languages classroom, such as English as a second language (ESL) or English as a foreign language (EFL). According to Phipps, pair-work is "for any form of pupil-pupil interaction without the intervention of the teacher".

According Jeremy Harmer, in pair work students can practice language together, study a text, research language or take a part in information-gap activities. They can write dialogues, predict the content of reading texts, or compare notes on what they have listened to or seen.

According Ayuz Sinta Widayati, this strategy has three steps. First, students think individually about a particular question or scenario. Then they pair up to discuss and compare their ideas. Finally, they are given the chance to share their ideas in a large class discussion.

From the explanation above, discussion was used to answer the question; Pair Work technique is effective to teach reading comprehension for the eleventh grade of MA Ma'arif Balong. So, the next step was hypothesis test to the data (variable x and y ) with interpretation.

Interpretation was consulted between $\mathrm{t}_{0}$ ( t -observation).
If $t_{0}$ higher than $\left(t_{0}>t_{t}\right)$ the result Ho was rejected and Ha was accepted.
If $\mathrm{t}_{0}$ smaller than $\left(\mathrm{t}_{0}<\mathrm{t}_{\mathrm{t}}\right)$ the result Ho was accepted and Ha was rejected.

1. Hypothesis nol (Ho)

Ho $=$ The Pair Work technique was not effective to teach reading comprehension for the eleventh grade of MA Ma'arif in academic year 2016/2017.
2. Hypothesis alternative (Ha)
$\mathrm{Ha}=$ The Pair Work technique was effective to teach reading comprehension for the eleventh grade of MA Ma'arif Balong in academic year 2016/2017.

To determine the $t_{0}$ was by checked $d b$ and consulted with the $t_{t}$ score:

$$
\begin{aligned}
\mathrm{Db} & =\left(\mathrm{N}_{1}+\mathrm{N}_{2}\right)-2 \\
& =(21+21)-2 \\
& =42-2 \\
& =40
\end{aligned}
$$

From the db score the research could known that in $5 \%$ significant level $\mathrm{t}_{0}$ $=4,546$ and $t_{t}=2,02$, so $t_{0} \geq t_{t}$, whereas $1 \%$ significant level $t_{0}=4,546$ and $t_{t}=$ 2,71 , so $t_{0} \leq t_{t}$. Based on the result, it could be concluded that $t_{0}>t_{t}$. It means that the Pair Work technique was not effective to teach reading comprehension for eleventh grade of MA Ma'arif Balong in academic year 2016/2017.

Since the result of this research was not effective, it was needed to analyze to know the reason why the technique was not effective. In addition, the time to applied Pair Work technique was limited because the researcher had 4 meeting, 2 meeting were pretest and posttest, and then 2 meeting were applied of Pair Work technique. The other reasons were the students needed to improve their vocabularies, because it was an import part to take easy in applying Pair Work technique to teach reading comprehension.

## CHAPTER V

## CLOSING

## A. Conclusion

Based on the result data analysis and discussion, there are some conclusion, they are:

The conclusion of this research is drawn by using pair work technique in teaching reading comprehension at the eleventh grade of MA Ma'arif Balong in academic year 2016/2017. Generally, this study revealed that the students who are taught by using pair work technique achieved better scores in reading comprehension than those who were not taught by using pair work technique.

In particular, the result of the research showed that in 5\% significant level $t_{0}=4,546$ and $t_{t}=2,02$, so $t_{0} \geq t_{t}$. Whereas $1 \%$ significant level $t_{0}=4,546$ and $t_{t}=$ 2,71 , so $t_{0}>t_{t}$. Based on the result, it could be concluded that $t_{0}>t_{t}$. It means that Ha was accepted and Ho was rejected.

It means that Pair Work technique is effective to facilitate the student's reading comprehension at the eleventh grade of MA Ma'arif Balong in academic year 2016/2017.

Based on the data descriptive above, it is know that there two reasons, internal and external reason:

1. Internal reason, for examples:
a) The students poor in vocabularies
b) The students' unmotivated and uninterested with reading
2. External reason, for examples:
a) The limit time of the research. So, there's no long time to teach reading comprehension with Pair Work technique.

## B. Recommendation

Based on the research finding above, the researcher has some recommendation that to be presented:

1. Lecturers

Reading lecturers are recommended to stimulate the student in applying the field independent to make the students have better achievement in reading subject.
2. Students

The students are expected to apply the field independent in reading subject to make reading is easier to be learnt for the students and to cover the difficulties that the students usually get in reading class.

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