A COMPARATIVE STUDY OF STUDENTS' READING COMPREHENSION ACHIEVEMENT BETWEEN NUMBERED HEADS TOGETHER TECHNIQUE AND PREDICTIVE READING TECHNIQUE AT THE FIRST GRADE OF SMA NEGERI 1 GEDONG TATAAN

A Script

By: SHOFURA CATURHANI



LANGUAGE AND ARTS EDUCATION DEPARTMENT TEACHER TRAINING AND EDUCATION FACULTY LAMPUNG UNIVERSITY 2019

Abstract

A COMPARATIVE STUDY OF STUDENTS' READING COMPREHENSION ACHIEVEMENT BETWEEN NUMBERED HEADS TOGETHER TECHNIQUE AND PREDICTIVE READING TECHNIQUE AT THE FIRST GRADE OF SMA NEGERI 1 GEDONG TATAAN

By

Shofura Caturhani

Mastering reading skills is equally difficult for all people, especially for students in high school. This is reasonably true since this activity requires the students not only to read the text but also to understand it. More specifically when it is concerning reading in terms of making inferences, making references, understanding vocabulary, finding specific information, and identifying main idea. Consequently, the students' experience involves crucial problem in mastering reading and the teacher has an important role to choose appropriate technique to facilitate the students in improving these reading skills.

This research was aimed at finding out whether there is a significant difference in students' reading comprehension achievement between those who are taught through NHT and PR technique and which reading aspect improved the most after being taught through NHT and PR technique in terms of macro skills. This research used quantitative approach and was conducted to 2 classes in SMAN 1 of Gedong Tataan. The researcher administered reading test to collect the data. The result showed that there is a significant difference in students' reading comprehension achievement between those who are taught through NHT and PR technique. It could be seen from the increase of students' mean score from pre-test to posttest and the T-test revealed those results are significant because p<0.05, p=.000.. Besides, reading aspect which improved the most is vocabulary aspect. This could be seen from the mean score from pre-test to posttest. Thus, there is a significant difference in students' reading comprehension achievement between those who are taught through NHT and PR technique. Moreover, vocabulary aspect is the aspect which improved the most in each class.

Keywords: Numbered Heads Together technique, Predictive Reading technique, Reading Comprehension, difference, improvement.

A COMPARATIVE STUDY OF STUDENTS' READING COMPREHENSION ACHIEVEMENT BETWEEN NUMBERED HEADS TOGETHER TECHNIQUE AND PREDICTIVE READING TECHNIQUE AT THE FIRST GRADE OF SMA NEGERI 1 GEDONG TATAAN

By:

SHOFURA CATURHANI

A Script

Submitted in a Partial Fulfillment of The Requirements for S-1 Degree

in
The Language and Arts Department of
Teacher Training and Education Faculty



LANGUAGE AND ARTS EDUCATION DEPARTMENT TEACHER TRAINING AND EDUCATION FACULTY LAMPUNG UNIVERSITY 2019 Research Title

A COMPARATIVE STUDY OF STUDENTS'
READING COMPREHENSION ACHIEVEMENT
BETWEEN NUMBERED HEADS TOGETHER
TECHNIQUE AND PREDICTIVE READING
TECHNIQUE AT THE FIRST GRADE OF SMAN 1

GEDONG TATAAN

Student's Name

: Shofura Caturhani

Student's Number

: 1513042026

Department

: Language and Arts Education

Study Program

: English Education

Faculty

: Teacher Training and Education

APPROVED BY

Advisory Committee

Advisor

Co-Advisor

Hery Yufrizal, M.A., Ph.D

NIP 19600719 198511 1 001

Brs. Sudirman M.Pd.

NIP 19550712 198603 1 002

The Chairperson of The Department of Language and Arts Education

> Dr. Nurlaksana Eko R., M.Pd. NIP 19640106 198803 1 001

ADMITTED BY

1. Examination Committee

Chairperson: Hery Yufrizal, M.A., Ph.D.

Monny

Examiner : Prof. Ag. Bambang Setiyadi, M.A., Ph.D.

Secretary : Drs. Sudirman, M.Pd.

Gu

2. The Dean of Teacher Training and Education Faculty

Prof. Dr. Patuan Raja, M.Pd. NIP 15620804 198905 1 001

Graduated on: August 13th, 2019

LEMBAR PERNYATAAN

Yang bertanda tangan dibawah ini, saya:

Nama : Shofura Caturhani

NPM : 1513042026

Program Studi : Pendidikan Bahasa Inggris

Jurusan : Pendidikan Bahasa dan Seni

Fakultas : Keguruan dan ilmu pendidikan

Judul Skripsi : A Comparative Study of Students' Reading

Comprehension Achievement between Numbered Heads Together Technique and Predictive Reading Technique at

the First Grade of SMAN 1 Gedong Tataan

Menyatakan bahwa skripsi ini adalah hasil karya sendiri. Sepanjang pengetahuan saya, karya ini tidak berisi materi yang ditulis oleh orang lain, kecuali bagian-bagian tertentu yang saya ambil sebagai acuan. Apabila ternyata terbukti bahwa pernyataan ini tidak benar, sepenuhnya menjadi tanggung jawab saya.

Bandar Lampung, 14 Agustus 2019 Penulis,

13BB7ADF09449260

Shofura Caturhani

CURRICULUM VITAE

The writer's name is Shofura Caturhani. She was born on November 10th 1997 in Cipadang, Gedong Tataan. She is the fourth child and the daughter of Ronggo Wardoyo and Neneng Hasanah. She also has three sisters named Mira Mustika, Mutiara Wardani and Annisa Parastry.

She started her study from elementary school at SDN 1 Padang Ratu and graduated in 2009. In the same year, she entered SMPN 1 Gedong Tataan and finished it in 2012. After graduating from junior high school, she continued her study in SMAN 1 Gading Rejo and graduated in 2015.

In 2015, she entered a university, majoring English Education Study Program, Teacher Training and Education Faculty of Lampung University. She conducted Teaching Practice Program (PPL) at MA Maarif 06 Pasir Sakti, East Lampung, from July 11th to August 25th 2018.

DEDICATION

Alhamdulillah, this script would humbly be dedicated to:

The greatest inspiration of my life: my beloved mother and father, Neneng Hasanah and Ronggo wardoyo

My beloved sisters: Annisa Parastry, Mira Mustika and Mutiara Wardani

My friends in English Education Study Program 2015

My almamater Lampung University

MOTTO

"Education is not preparation for life; education is life itself"
(John Dewey)

ACKNOWLEDGEMENT

All praise are rendered only to Allah SWT, the almighty God, for the gracious mercy and blessing that enables the writer to finish this script. Greeting is never forgotten, praise upon Prophet Muhammad SAW and his family, followers and all muslims. This script entitled "A Comparative study of students' reading comprehension achievement between numbered heads together technique and predictive reading technique at the first grade of SMA Negeri 1 Gedong Tataan" is submitted as acompulsory fulfillment of the requirement for S-1 Degree at The Language and Arts Education Department of Teacher Training and Education Faculty of University of Lampung.

In this case, the writer would like to express her deep gratitude and respect for those who have contribution in helping and supporting her to finish this script.

- 1. Hery Yufrizal M.A. Ph.D., as the first advisor, thank you for your critiques, motivation and encouragement in supporting the writer.
- 2. Drs. Sudirman, M.Pd., as the second advisor, thank you for your ideas, guidance and carefulness in correcting the writer's research.
- 3. Prof. Ag. Bambang Setiyadi, Ph.D., as the examiner, thank you for your encouragement, ideas, and suggestions in supporting the writer.
- 4. Drs. Basturi Hasan, M.Pd., my best advisor, thank you for your ideas, guidance and carefulness in correcting the writer's research.
- 5. Dr. Ari Nurweni, M.A., as the Chief of English Education Study Program and all lecturers of English Education Study Program who have contributed their guidance during the completion process until accomplishing this research.
- 6. My beloved parents, Neneng Hasanah and Ronggo Wardoyo. Thank you for the endless love, pray, biggest motivation and best support in accomplishing my study.
- 7. My beloved sister; Annisa Parastry, thank you for your love, support, pray and motivation.
- 8. My sisters; Mira Mustika and Mutiara Wardani thank you for your support, and pray.

- 9. My best partner; Zulfikar Nirwana Prasasti, thank you for always supporting and accompanying me. Thank you for your love, motivation, pray, and always listened to my grievance.
- 10. My Silly friends; Kiki, Nadya, Lilis, and Ais. Thank you for your craziness, kindness and being my struggle partners for all this time.
- 11. My lovely mates; Jupe, Intan, Alfu, Pebi, and Ayu. Thank you for your support, pray and always listened to all my stories.
- 12. My KKN/PPL partners; Tias, Enolia, Anggi, Reno and Ando. Thankyou for always supporting me.
- 13. All friends in B class of English Department 2015, thank you for the pleasure and challenging time which had been experienced together.
- 14. My entire mate in English Department 2015, thank you for all the stories.

Finally, I gratefully thank to everyone who was important to the realization of this script. The writer realizes that this script is far from being perfect, but it is expected that it will be useful not only for the researcher, but also for the readers. For this reason, constructive thoughtful suggestion and critics are welcomed. There are might be weakness in this research. Thus, comments, critiques, and

suggestions are always opened for better research. Somehow, the writer hopes this research would give a positive contribution to the educational development, the readers and to those who want accomplish further research.

Bandar Lampung, Agustus 2019,

Shofura Caturhani

TABLE OF CONTENTS

| COVER | |
|--|------|
| ABSTRACT | ii |
| APPROVAL | |
| ADMISSION | |
| SURAT PERNYATAAN | vi |
| CURRICULUM VITAE | vii |
| DEDICATION | viii |
| MOTTO | |
| AKNOWLEDGEMENT | |
| TABLE OF CONTENTS | |
| LIST OF APPENDICES | |
| LIST OF TABLES | XV |
| I. INTRODUCTION | |
| 1.1 Background of The problem | 1 |
| 1.2 Research Question | |
| 1.3 Objectives | 6 |
| 1.4 Uses | |
| 1.5 Scope | |
| 1.6 Definition of terms | 8 |
| II. LITERATURE REVIEW | |
| 2.1 Review of Previous Studies | |
| 2.2 Review of Related Literature | |
| 2.2.1 Concept of Reading | |
| 2.2.2 Concept of Reading Comprehension | |
| 2.2.2.1 Notion of Macro and Micro Skill | |
| 2.2.3 Concept of Numbered Heads Together Technique | |
| 2.2.4 Strength and Weaknesses of NHT Technique | |
| 2.2.5 Procedure of Using NHT Technique | |
| 2.2.6 Concept of Predictive Reading Technique | |
| 2.2.7 Strength and Weaknesses of PR Technique | |
| 2.2.8 Procedure of Using PR Technique | |
| 2.2.9 Theoretical Assumption | 33 |
| III. METHODS OF THE RESEARCH | |
| 3.1 Design of The Research | |
| 3.2 Population and Sample | |
| 3.3 Variables | |
| 3.4 Instruments of The Research | |
| 3.5 Validity | |
| 3.6 Reliability | |
| 3.7 Data Collecting Technique | |
| 3.8 Research Procedures | |
| 3.9 Data Analysis | |
| 3.10 Hypothesis Testing | 44 |

| IV. RESULTS AND DISCUSSIONS | |
|--|----|
| 4.1 Results of The Research | 45 |
| 4.1.1 Results of Pre test | 46 |
| 4.1.2 Results of Post test | 48 |
| 4.1.3 Results of Data Treatment | 51 |
| 4.1.3.1 Normality Test | |
| 4.1.3.2 The Comparison of Students' Result | |
| 4.1.3.3 The Improvement of Reading Aspects | 54 |
| 4.1.3.4 The Increase of Students Reading Comprehension | |
| 4.1.4 Discussion of Findings | |
| 4.1.4.1 Discussion of Reading Aspects in Exp Class | |
| 4.1.4.2 Discussion of Reading Aspects in Control Class | |
| V. CONCLUSIONS AND SUGGESTIONS | |
| 5.1 Conclusions | 66 |
| 5.2 Suggestions | 69 |
| REFERENCES | |
| APPENDICES | |

LIST OF APPENDICES

| Appendix 1. Reading Test | 73 |
|---|-----|
| Appendix 2. Lesson Plan | 85 |
| Appendix 3. Validity Judgment of Reading Test | 128 |
| Appendix 4. Reliability of The Test | 129 |
| Appendix 5. Students' Score of Pre test and Post test | 131 |
| Appendix 6. Comparison Result of Experimental Class and Control Class | 132 |
| Appendix 7. Post Hoc test for Experimental Class | 133 |
| Appendix 8. Post Hoc test for Control Class | 135 |
| Appendix 9. Repeated Measures T-test in Experimental Class | 137 |
| Appendix 10. Repeated Measures T-test in Control Class | 139 |

LIST OF TABLES

| Table 4.1 Homogeneity of Pre Test | 47 |
|---|----|
| Table 4.2 Distribution of Students' Pretest in Experimental Class | 47 |
| Table 4.3 Distribution of Students' Pretest in Control Class | 48 |
| Table 4.4 Homogeneity of Post Test | 49 |
| Table 4.5 Distribution of Students' Postest in Experimental Class | 50 |
| Table 4.6 Distribution of Students' Postest in Control Class | 50 |
| Table 4.7 Normality test | 52 |
| Table 4.8 The Comparison Result | 52 |
| Table 4.9 The Improvement of Reading Aspects in Exp class | 54 |
| Table 4.10 The Improvement of Reading Aspects in Control class | 56 |
| Table 4.11 The Increase of Students' Reading Comprehension | 58 |

I. INTRODUCTION

This chapter indicates some points such as background of the problem, research questions, objectives of the research, uses of the research, scope of the research and definition of terms.

1.1 Background of the Problem

English is known as a foreign language in Indonesia. It is important for students to understand English, because textbooks and other publications are mostly written in the form of English. In learning English, it cannot be separated from the four of language skills: listening, speaking, reading and writing. Among those language skills, reading functions as one of essential skills for the students because in learning English the students have to be able to read information in a textbook which is mostly written in English. More importantly, if they have a good ability in reading, they will have a better chance to succed in their study.

It is now clear that, reading is an important skill for most students of English throughout the world, especially in the countries where foreign language learners do not have the opportunity to interact with native speakers but have access to the written form of that language. Furthermore, Mahfoodh (2007:1) states that having good reading proficiency means that the reader has abilities to understand written statements or any type of written text accurately and efficiently. Therefore, studen ts should practice intensively so that they are able to comprehend the text well.

Broadly, reading is one of the basic skills in English which is not simply learnt through translating word by word but principally needs to be acquired appropriately during and after language course. For this reason, when the students learn to read, they should be able to comprehend the reading text during the process of reading. Thereby, they are not only expected to read the text in good pronunciation or to find the meaning of each word within the text. Further, Snow (2002:11) points out that reading comprehension is a process of extracting and constucting meaning simultaneously by doing some interaction and involvement with written language.

However, it is commonly acknowledged that SMA students are still not yet able to achieve reading comprehension skills. This makes sense since reading possesses some crucial components to be mastered, such as (1) determining main idea i.e. how to determine central information of a paragraph, (2) identifying specific information i.e how to identify particular piece of information in the text, such as place, time and characters, (3) reference i.e words or phrase used either before or after the references in reading material. In contrast, the students tend to avoid necessary complex of words or phrases, (4) making inference i.e. how to guess certain idea from the information which we have read or known, and (5) vocabulary i.e how to determine the meaning and classify vocabulary items based on word classes of reading material.

Evidently, during pre-observation activity in SMAN 1 Gedong Tataan, it was found that students had difficulty in comprehending the reading text in terms of macro skills. Possibly, this might be caused by interest in the material (the text), schemata (background knowledge), and teaching techniques. This was actually

seen when the teacher asked some questions, they experienced a number of difficulties to answer the questions. Consequently, they often answered the questions incorrectly even no one answered the questions.

Previous studies conducted by Masruroh (2011) found that the tenth grade students of SMAN 1 Cerme principally were still not able to comprehend reading materials in their reading practice, especially in terms of macro skills (determining main idea, identying specific information, reference, inference, and vocabulary). It was indicated on the students' scores of test is bad. She also said that they got difficult to answer some questions about the reading text. Additionally, Evinda (2009) found that the first year students of SMA Al Huda Jatimulyo also still not able to comprehend reading text well. She also found that the students often answer the questions incorrectly which makes the average scores of students in the pre-test were below the average.

There are basically many ways to be good at reading, such as the readers should know the purpose of the reading, they should also have awareness of type of material which they read, and the last they are also hoped to have learning strategies in reading which help them to comprehend the written text. It is now clear that, reading comprehension requires a lot of things such as; motivation, mental frameworks for holding the main ideas, concentration, and appropriate learning strategies. In point of fact, many students of SMA in Indonesia do not have reading habit and most of them still face many problems in comprehending reading text.

Presumably, to handle this problem, teacher thereby should be able to choose the appropriate method and teaching technique so that students can be led to properly acquire skills of comprehending the text. In other words, Teaching technique is the structure, system, method, strategy, procedure and process that a teacher uses during instruction. Unavoidably, an English teacher should find appropriate technique that can be used to help students in order interest and active in teaching learning activity. The most important point is that the technique should provide the students with an ability to obtain the learning goal.

With regard to previous clarification, a representative teacher should to find an alternative strategy to handle these problems. In dealing with this, numbered heads together and predictive reading techniques are equally proposed. In its nature, numbered heads together technique is one of cooperative learning strategies that hold each student accountable for learning the material. Here, students are placed in groups and each person is given a number; afterword they work together to solve the problem, to finish the task to get the goal. There is of course no domination student because each of them has each role in their team based on their each number. Thus, they become more active in teaching learning activity.

Meanwhile, predictive reading technique is a technique which is using illustrating material (photograph, map, and graph) and the title. Predictive reading technique has effect for the readers to comprehend the text. It helps the students to activate their awareness of the subject and also focus on their reading. The students improve their capability because they could comprehend the text by using their

background knowledge based on the picture. It is assumed that predictive reading can be one of techniques that can interest students in teaching learning activity.

In short, this study choose Number heads together (NHT) technique and Predictive reading (PR) technique because looking at the reality that students become more active when they are studying in group and also become more interest in teaching learning activity if the teacher uses illustrating materials. Accordingly, they more active when they learn with their friends, because it can omit their fear and make them be able to express their idea. Furthermore, NHT technique and PR technique can make them more active in teaching learning activity.

The previous studies presented above, indicated that there are many students especially tenth grade students are still not able to comprehend reading text. With reference to the problem, this study tries to propose NHT and PR technique. This is reasonable because both NHT and PR technique are considered effective teaching techniques which can improve students' reading comprehension. Considering those reasons, this research intends to apply those teaching techniques and compare which one is able to improve students' reading comprehension better.

With regard to the description, this research was conducted in SMA Negeri 1 Gedong Tataan as the school that never been held this research before. The results of this study finally could be a consideration for teacher nowadays to make teaching reading comprehension better and increase the reading comprehension ability. Hopefully, by presenting NHT and PR technique students' reading comprehension could increase.

1.2 Research Questions

In line with the background of the problems above, research questions can accordingly be:

- 1. Is there any significant difference of students' reading comprehension achievement between those who are taught through numbered heads together technique and those who are taught through predictive reading technique?
- 2. Which aspect of reading comprehension achievement in terms of macro skills does improve the most after being taught through NHT and PR techniques?

1.3 Objectives

Referring to the research questions above, the objectives of this research are as follows:

- To investigate whether there is a significant difference of students' reading comprehension achievement between those who are taught through numbered heads together technique and those who are taught through predictive reading technique.
- To determine which aspect of reading that improves the most after being taught through NHT and PR techniques.

1.4 Uses

This research can hopefully be useful both theoretically and practically:

- Theoretically, the result of this research is expected to support the existing theory of reading comprehension and to verify previous research finding and theories.
- Practically, the result of the research may give information to the English teachers about which technique is more effective for teaching reading comprehension.

1.5 Scope

This research is a quantitative research with the subject of this research was the first grade students in SMAN 1 Gedong Tataan. This research focused on students' reading comprehension in narrative text. Thus, the first grade students were taken as the subject because they have learnt vocabulary, grammar and some kinds of text, especially Narrative text. This research only focused on five aspects of reading in terms of macro skills since macro skills is a main skills. To comprehend the micro skills, it is needed to understand the macro skills first. This research also focused on teaching reading comprehension by using NHT technique and PR technique as the way to increase students' reading comprehension, since this research wanted to compare which method is better in teaching reading comprehension. Two classes were chosen as the subjects; basically, those two classes was in the same stratum. The reading texts were taken from the English textbook for Senior High School Based Curriculum

Development. For this reason, this research also basically used the materials from internet or other sources.

1.6 Definition of terms

In this research, the researcher uses some definition of terms as below:

- 1) Reading. This is one of important skills that are needed by the students in order to get information based on what they have already read.
- 2) Reading Comprehension. This skill is a process of interaction between the reader with the text and the reader relates the idea from the text to the background knowledge.
- 3) Numbered heads together technique. This technique is one of cooperative learning strategies that hold each student accountable for learning the material. Students are placed in groups and each person is given a number (from one to the maximum number in each group) to solve the problem together.
- 4) Predictive reading technique. This is a technique in reading in which the reader is asked to apply their background knowledge as well by using picture.
- 5) Achievement. In this research, achievement means the result of what the students has learned.
- 6) Macro Skills. These skills are big scope of reading skills including some principles in mastering reading elements: (1) identify main idea, (2) specific information, (3) inference, (4) reference, and (5) vocabulary.

- 6.1) Main idea. This element refers to important information that tells more about the overall idea of a paragraph or section of a text.
- 6.2) Specific information. This reading component develops the topic sentence by giving an incident, cause, and effect.
- 6.3) Inference. This component is an educational guess or prediction about something unknown based on available facts and information.
- 6.4) Reference. This is words or phrase used either before or after the references in reading material. They are used to avoid unnecessary repletion of words or phrases.
- 6.5) Vocabulary. In this research, vocabulary denotes comprehending parts of speech covering:
 - 6.5.1) Content words are words that have meaning. They are words we view as nouns, verbs, adjectives and adverbs.
 - 6.5.2) Function words are words that exist to explain or create grammatical or structural relationships into which the content words may fit. Words like "of," "the," "to," they have little meaning on their own.

However, this research merely focuses on content words, because function words requires a lot more time allocation to fully discussed about them.

As the study has elaborated the points above; in brief, this study already has the logical background in conducting the research. Still, this study needs the review of theories concerning the research topics and conceptual framework underlying the study as the next chapter is presented.

II. LITERATURE REVIEW

This chapter deals with several points, such as: review of previous studies, concept of reading comprehension, concept of NHT technique, strengths and weaknesses of NHT technique, procedures of using NHT technique, concept of predictive reading, strengths and weaknesses of predictive reading, procedures of using predictive reading, and theoretical assumption.

2.1 Review of Previous Studies

There are some previous studies which have shown that these two techniques for teaching reading applicable appropriately. Previous research conducted by Masruroh (2011) found that NHT technique was effective as the way to teach reading comprehension at the tenth grade of SMAN 1 Cerme. This obviously makes sense because the students' scores of post test improved significantly. More especially, by using this technique, the students could learn by working in groups.

This is also supported by Irawan's study (2011) where in which he found that NHT could improve students' reading comprehension and the classroom situation in teaching and learning narrative text. The improvement of students' comprehension indicated that students were able to: (1) recognize sentence meaning, (2) infer communicative purpose of the text.

Meanwhile, Evinda (2009) found that there was a significant difference of students' reading comprehension achievement between students who were taught through predictive reading technique and those taught through conventional technique. In additional, she also found that the average scores of students who were taught through predictive reading technique were higher than those who were taught through conventional technique. Then, Wulandari (2017) also found that predictive reading can improve students' reading comprehension especially in descriptive text. the use of prediction improved students' reading comprehension of descriptive text in all reading aspects.

With reference to the previous research above, it can be stated that NHT technique can increase students' reading comprehension. On the other hand, predictive reading technique can also improve students' reading comprehesion and it is more effective than conventional technique for teaching reading.

Eventually, the researcher assumes that both NHT and predictive reading technique can increase students' reading comprehension. The researcher interested in comparing those technique to find whether there is a difference between NHT and PR technique in students' reading comprehension achievement and which technique is better for students' reading comprehension achievement in terms of macro skills.

2.2 Review of Related Literature

There are some related literature in this study that would be discussed, such as the concept of reading, the concept of reading comprehension, notion of macro and

micro skills of reading comprehension, the concept, strength and weaknesses then the procedure of each techniques, theoretical assumption and hypothesis.

2.2.1 Concept of Reading

Generally, reading can be defined into several definitions. The first, according to Nuttal (2000: 2) states reading means a result of interaction between the writer's mind and the reader's mind. It is the way how to the reader tries to get the message or the intended meaning from the writer. In this process, the reader tries to create the meanings intended by the writer, the reader can get the message and the writer's meaning sense. Second, Brown (2004: 189) points out that reading is a process of negotiation of meaning. In this process, the readers bring their early thought to the net parts of the reading process to finally reach their understanding of the meaning of the text they read. Third, Aebershold and Field (as cited in Khalaji, 2012) points that reading is what happens when people look at a text and assign meaning to the written symbols in that text. It means that reading is the process of reader's mind or process of mental activity in trying to interpret the perception of symbols that present language.

Therefore, reading can be stated as an active process of getting the meaning of printed words or verbal symbols in written text. In order to get the intended meaning from the text, a reader has to comprehend what she/he has read. During this process, a reader combines his/her language skills and background knowledge to grasp the meaning.

2.2.2 Concept of Reading Comprehension

Unavoidably, in the reading process, the reader needs comprehension to get the points of the reading text. In the other words, there is no reading without comprehension. Comprehension is the process of making sense of words, sentences and connected text. Durkin (1993) states that comprehension is the essence of reading and the active process of constructing meaning from text. Additionally, Rand (2002:11) points out that reading comprehension is the process of simultaneously extracting and constructing meaning through interaction and involvement with written language and it consists of three elements: the readers, the text, and the activity or purpose of reading.

As quoted by Mardio (2016), in Milkuclaky (2007:74) states that reading comprehension is more than just recognizing and understanding words. Specifically, true comprehension means making sense what you read both connecting the ideas in the text what you already know and remembering what you have read. In brief, reading comprehension is thinking while you read.

Referring to the explanation, it can be asserted that reading comprehension is the process of understanding the message and store information presented in the reading text.

In contrast, reading is not easy as people thought. This is true because, being able to read and comprehend English texts easily readers need some micro and macro skills. As well as, Brown (2004: 187-188) proposes fourteen reading skills which are divided into micro skills and macro skills.

2.2.2.1 Notion of Micro and Macro Skills of Reading Comprehension

In the process of extracting and constructing meaning from the text, kinds of intelectual skills are needed. Brown (2004: 187-188) states that aside from attending to genres of text, the skills and strategies for accomplishing reading emerge as a crucial consideration in the assessment of reading ability. The microand macro skills below represent the spectrum of possibilities for objectives in the assessment of reading comprehension. There are seven micro skills in reading comprehension. To be more concrete, here is the full text of narrative paragraph that can be further analyzed by these micro skills stated earlier.

The Monkeys and The Cap Seller

Once upon a time, a cap seller was passing through a jungle. He was very tired and needed to rest. Then, he stopped and spread a cloth under a tree. He placed his bag full of caps near him and lay down with his cap on his head. The cap seller had a sound sleep for one hour. When he got up, the first thing he did was to look into his bag. He was startled when he found all his caps were not there.

When he looked up the sky, he was very surprised to see monkeys sitting on the branches of a tree, each of the monkeys is wearing a cap of on its head. They had evidently done it to imitate him. He decided to get his caps back by making a humble request to the monkeys. In return, the monkeys only made faces of him. When he begun to make gesture, the monkeys also imitated him.

At last, he found a clever idea. "Monkeys are a great imitator," he said. So he took off his own cap and threw it down on the ground. And as he had expected, all the monkeys took off the caps and threw the caps down on the ground. Quickly, he stood up and collected the caps, put them back into his bag and went away.

(Adapted from: http://www.englishcafe.co.id/pengertian-narrative-text-dalam-bahasa-inggris.)

The text above, can naturally be analyzed by the following aspects of micro skills.

- 1. Discriminating among the distinctive graphemes and orthographic pattern of English. Grapheme is a letter or letter pattern that spells a phoneme (speech sound). English has a complex code in which 1-4 letter graphemes can represent 1 sound. For example, 1 letter grapheme: c a p /kæp/. The sounds /k/ is represented by the letter 'c'. 2 letter grapheme: s l ee p /sli:p/. The sound /i:/ is represented by the letters 'e e'. 3 letter grapheme: e igh t /eIt/. The sound /it/ is represented by the letters 'i g h'. 4 letter grapheme: th r ough /sru:/. The sound/oo/ is represented by the letters 'o u g h'. Then, orthographic is the set of symbols used and the rules about how to write these symbols. The example of the word cap /kæp/ consists of three letters (c), (a), and (p), in which (c) represents the sound /k/, (a) the sound /a/, and (t) the sound /t/. This typical aspect of reading is crucial in reading especially in the beginning level.
- 2. Retaining chunks of language of deference lengths in short-term memory. In studies of language acquisition, chunks of language are several words that are customarily used together in a fixed expression, such as "in my opinion," "you know what I mean," or "I know what you're saying".
- Process writing at an efficient rate of speed to suit the purpose. For example, students are assigned to do note-taking by focusing on key words available in the lesson materials.
- 4. Recognizing a core of word, and interpreting word order patterns and their significance. A core word is a set of words that a student is expected to be

- able to read and spell. Examples of core word are *I*, *you*, *cap*, *monkey*, *rest*, *tree*, *bag*.
- Recognizing grammatical word classes (nouns, verbs, etc.), systems (e.g.,tense, agreement, and pluralization), patterns, rules, and elliptical forms. For example, 1) grammatical word classes. E.g. "I like flower." the underlined word is a noun and the word which is typed bold is a verb.
 systems. E.g. "She works in the office." the sentence uses present tense.
 patterns, rules and elliptical forms. E.g. "I go to school and he does too goes to school." the underlined sentence is an elliptical sentence.
- 6. Recognizing that particular meaning may be expressed in different grammatical forms. Recognize that a particular meaning may be expressed in different grammatical forms. For example, word forms *cap*, *caps* have the same lexical meaning and have different grammatical meanings. They constitute a lexeme (about this sound pronunciation). Word-forms *bag and cap*, the same grammatical meaning and have different lexical meanings. They constitute a grammeme (a categorical form, a form class).
- 7. Recognizing cohesive in written discourse and their rule in signaling the relationship between and among clauses. Here are of the cohesive device in synonym, When he looked up the sky, he was very surprised to see monkeys sitting on the branches of a tree, each of the monkeys is wearing a cap of on its head. In pronouns, this, that, these,those, he, she, it, they, and we are useful pronouns for referring back to something previously mentioned, for example: 1) Once, a cap seller was passing through a

jungle. **He** was very tired and needed to rest. 2) **Nana** is my friend. **She** is very beautiful.

In order to be clearer, the following text is used as an example of the implementation of macro skills analysis.

The Tortoise and the Hare

Once there was a speedy hare who bragged about how fast he could run. Tired of hearing him boast, the tortoise challenged him to a race. The entire animal in forest gathered to watch.

Hare run down the road for a while and then paused to rest. He looked back at the tortoise and cried out, "How do you expect to win this race when you are walking along at your slow, slow pace?" Hare stretched himself out alongside the road and fell asleep.

The animals who were watching cheered so loudly for tortoise, they woke up Hare. Hare began to run again, but it was too late. Tortoise was over the line. After that, Hare always reminded himself, "Don't brag about your lightning pace, for slow and steady won the race!"

(Adapted from https://www.storyarts.org/library/aesops/s/.html)

with regard to the basic principle of macro skills presented earlier: the analysis of the text can be done as they are seen below:

1. Recognizing the rhetorical forms of written discourse and their significance for interpretation. It is the ability to know narrative writing which is intended to seem important or influence finding specific information out of a text from an explanation of what something means. e.g. Once there was a speedy hare who bragged about how fast he could run. Tired of hearing him boast, the tortoise challenged him to a race(line)

- 1 and 2). Those sentences are introductory paragraph which helps the readers to define the subject and to develop another paragraph.
- 2. Recognizing the communicative function of written text, according to form and purpose. The readers should have the purpose before they read the text. So, after they already finished in reading the text, they will get what they want.

The form of the text is monologue text, especially narrative text. Before the students read the text, they should have a purpose which is the purpose will allow the students to get the answer (e.g. Who are the characters in the story?). From the example question, the purpose is to find out the characters in the story. So, the readers should find out the characters in the story. In the story, the characters of the story are the tortoise and the hare.

- 3. Inferring context that is not explicit using background knowledge. Making inference is a good guess or conclusion drawn based on the logic of passage. Finding making inference means the reader imply the sentences or passages understand and conclude it logically. For example:
 - a. The character of the hare is arrogant. (It is because the hare thought that the tortoise would not win the race since he is walking so slow.)
 - b. The end of the story is the tortoise won the race. (Since the hare fell asleep.)
- 4. From described events, and ideas infer links and connections between events, deduce causes and effects, and detect such relations as determining main idea, supporting idea, new information, given information, generalization, and exemplification.

Determining main idea is the most important piece of information the author wants to know about the concept of a paragraph. Also, determining main idea is a skill to grasp and find the main point of a passage by summarizing its passage and looking for repetition of ideas/words. For example:

- a. Determining main idea in the first paragraph is the tortoise tired of hearing the hare boast, so he challenged him.
- b. Determining main idea in the second paragraph is *the arrogance hare*.
- c. Determining main idea in the third paragraph is *the hare realized his arrogance*.
- 5. Distinguishing between literal and implied meaning. Literal meaning is exactly what the words say. Where implied meaning is what is suggested.
 - a. Literal Meaning

The literal meaning of a sign is what it denotes. The literal meaning is underlined. For example:

"How do you accept to win this race when you are walking along at your slow, <u>slow pace?</u>"

As can be noted in this context, slow pace means the tortoise.

b. Implied Meaning

while the implied meaning is what the sign connotes. The implied meaning is underlined. For example:

"How do you accept to win this race when you are walking along at your slow, <u>slow pace</u>?"

In this context, slow pace can mean snail.

- 6. Detecting cultural specific references and interpreting them in context of the appropriate cultural schemata. Reference is the intentional use of one thing to indicate something else in which one provides the information necessary to interpret the other. Reference means interpreting and determining one linguistic expression to another. For examples:
 - a. Tired of hearing **him** boast. The word "him" on the sentence refers to hare.
 - b. He looked back at the tortoise and cried out. The word "he" on the sentence refers to hare.
 - c. *They* woke up hare. The word "they" on the sentence refers to animals.
 - d. How do you expect to win this race. The word "you" on the sentence refers to tortoise.
 - e. Hare began to run again, but it was too late. The word "it" on the sentence refers to
- 7. Developing and using a battery of reading strategies such as scanning means glancing rapidly through the text either to search for a specific piece of information (name, date, place, etc) whether the text is suitable for given purpose (Nuttal, 1982: 34) and skimming is the process of rapid coverage of reading matter to determine main idea (Brown, 2004: 213). Detecting discourse markers, guessing the meaning of words from context, and activating schemata for the interpretation of texts.
 - a. Guessing Meaning of Word

Guessing meaning of the word refers to comprehend what the unfamiliar words mean by seeing its synonym or antonym related to the context. In

addition, we can also try to guess the meaning of word by comprehending one or two previous sentences in the text. For example:

- a) Synonym
- a. Pause is synonymous with stop. E.g. The car stopped at the traffic lights.
- b. Speedy is synonymous with fast. E.g. Ronald is the world's fastest runner.
- c. Began is synonymous with start. E.g I start to work at nine A.M everyday.
- b) Antonym
- a. Fast is antonymous with Slow. E.g. Chintya is a slow driver.
- b. Loudly is antonymous with Silently. E.g. She crept silently out of the room.

2.2.3 Concept of Numbered Heads Together Technique

Originally, NHT technique is derived from the work of Kagan and introduced this model in 1992. NHT is one of the cooperative learning strategies that hold each student accountable for learning the material. In dealing with this technique, Lie (2003: 6) stated that the students are grouped in small group and solve the problem cooperatively. It is expected that through this technique, students are able to solve the problem together and each of them has a change to express their idea to find the best answer so the students seems to be more active in learning. In his study, he proved that NHT was able to give a chance to students to express their idea and compare which answer is the best.

Moreover, Slavin (1999) said that when disabled and handicapped students work in mainstream and heterogeneous environments, they learn in a more productive and skillful manner. By using this technique, the students can work their tasks together to solve the problems. There is no domination student because each of them has each role in their team based on their each number. Each student will answer their each work sheet. Next, they will discuss their answer with their partner group to find the best answer before present it in front. This session can help student build their personal confident.

Furthermore, Ibrahim (2000:78) in his study has measured the implementation of NHT in terms of cooperative learning-type, he simply described the steps in applying this technique as follows:

Step-1: Numbering. Here, teacher divides students into groups of 4 or 5 people member and each group member is given a number, e.g. 1,2,3 and 4.

Step-2: Asking Questions. In this step, the teacher asks a question to the students. Questions may vary and can be very specific.

Step-3: Thinking Together. To do this, students unite his opinion against the answers to that question and make sure every member in the team knows that answer.

Step-4: Answering. In the last step, teacher calls a certain number, then the student whose number according raise hands and try to answer the question for the entire class.

In short, this technique has a purpose to make students more active in learning, because they have a chance to share their idea. NHT technique gives students an opportunity to be more active and provides a means for them to see other problem solving methodologies. That is why NHT is worth as one of alternative techniques in teaching reading.

2.2.4 Strengths and weaknesses of NHT Technique

In the implementation of NHT technique, there are some strengths and weaknesses. These are the strengths of NHT technique:

- It helps students to build up their ability to interact with others. It is because in this technique, students should work together with their friends.
- 2) It is very easy to prepare and to apply, because this technique does not requires much material to apply.
- 3) It encourages students to be active participants, because each student should answer teacher's question and it makes students be more active.
- 4) It stimulates students to express their idea and learn to respect others opinions, since this technique requires students to answer some question from teacher.
- 5) It helps students to care with their friends to master the material so they can cooperate with each other. It is because this technique encourages the students to think together to find the best answer for their group.

6) It gives students a chance to share knowledge and information that they have, because the students should give their own opinion in their group about the answer of the teacher's question. Therefore, other students may get new information from it.

However, every technique must have weaknesses inside. These are the weaknesses of NHT technique:

- 1) It needs a little bit time consuming. It is because in this technique the students need to think together and each group should answer the teacher's question. It may consume a lot of time.
- 2) The students might get bored and will be noisy if the teacher can not handle the class well. They might get bored when the teacher still focus on other groups.
- 3) Not all of the number is called by the teacher. It is because the time is limit when applying this technique in class.

2.2.5 Procedures of Using Numbered Heads Together Technique

Viewing the stages of developing the students' reading skill given by Ibrahim (2000:78) that has been explained before, the procedures of teaching reading through NHT technique is modified as follows:

1. Pre-activity

 a. Students are introduced the topic and given brainstorming the material based on their background knowledge related to the topic.
 Here are the examples:

T: "Students, Do you know what narrative text is?"

S: "Yes, we do Miss."

T: "What do you know about narrative text?"

S: "Narrative is a kind of text which use past tense."

b. The students are informed the material which is going to be learned and introduced NHT procedure.

Here are the examples:

T: "Students, today we are going to learn about narrative text. I am sure that all of you have already know about narrative text because you have learnt it in SMP."

S: "It is alright"

T: "Today, I want to use NHT technique in teaching this narrative text. In applying NHT technique all of you are placed in groups and each person is given a number to solve the problem together. well, let's start by counting."

2. Whilst-activity

a. The students are divided into NHT group consist of 4 students.

For example:

T: "Students who got number one please come together in a place, number two, three and four too"

S: "Yes, Miss."

b. The students are given the reading text in form narrative text. Each of them get each task. *Student one* read paragraph 1, *student two* read paragraph 2, *student three* read paragraph 3, *student four* read last paragraph (numbering).

For example:

T: "Please count from one to four in your group and the student who get number one should read paragraph one and so on."

S: "Yes, Miss."

c. Each student should find the main idea and some information from the text that they have based on the work sheet that is given by the teacher (asking question).

T: "Well students, now you have to find main idea and some information from the text"

S: "Alright Miss"

d. After answering the questions, the students discuss their answer with their group member. So, their friend are able to master the answer (thinking together).

For example:

T: "Please read your paragraph and answer the questions from the worksheet. Discuss it with your group member."

e. One student is called to present their answer. In this session, other members should help their friend if other group against their opinion. In here, another group should give their each opinion. Whether their answer is true or not. So they can fulfill each other and find perfect answer (answering).

Here are the examples:

T: "Group one please read and answer the question."

S: "What makes Malin as a rebellious man? It is because Malin fell in love with the girl."

T: "How is about the answer? Do you all agree?"

S: "No, Miss. I think, Malin is a rebellious man because he was shy about his past, especially his mother."

3. Post-activity

- a. If the students have achieved the reading target, the teacher discuss it together with the students.
- b. Making conclusions what they have already learned.

Here are the examples:

T: "So, students what have we learnt about today?"

S: "Today we learnt about narrative text and comprehend the content of the text"

T: "Yes, That is good. We learnt about narrative and some aspects of reading."

2.2.6 Concept of Predictive Reading Technique

According to Smith (1982: 68), the basis of learning is prediction. The students will predict the material when they do not understand the material well. From that statement, it can be inferred that the students do prediction in every time they learn something. In this case, prediction can make the students more comprehend the material well through the pictures.

Markstein, et al. (1982: 6) predictive reading technique is a technique that is used in teaching reading by using illustrative material (photograph, map, and graph) and the title. In predictive reading, the students have to discuss:

- 1) What they think the subject is. The students are asked to predict the topic of the text based on the prior knowledge after the teacher shows the picture. This part can prepare students for what they are going to read by providing clues to meaning.
- 2) What the picture tell them about the subject. By using picture, the students are encouraged to draw the content of the text on their mind to assist reading comprehension.
- 3) How they feel about the subject; taking care to examine in detail their past experience or knowledge of the subject. By using the extra clues, elicit more details, the students can predict the content of the text effectively.

It can be assumed that predictive reading is a technique in reading in which the reader is expected to apply their background knowledge as well by using picture.

In addition, predictive reading has strong effect for the reader to comprehend the text by using illustrative materials. Predictive reading helps students to activate their awareness of the subject, activate background knowledge, provide purposes for reading, and focus on their reading. In implementing the technique, the teacher asks the students to apply their background knowledge which can help them to predict the text in order to comprehend and to interpret contextual meaning beyond the passage they face.

2.2.7 Strengths and Weaknesses of Predictive Reading Technique

There are also some strengths and weaknesses in the implementation of Predictive Reading technique. Below some strengths of Predictive Reading technique:

- 1) It motivates the students to use their schemata or background knowledge in reading the text. So they can focus on the main point of their reading.
- It uses picture as a media that makes students are interested in the reading.
 By accompanying picture, the students will give more attention to the reading text.
- 3) Teaching learning process can be more interest, because it uses picture which can attract students' attention.
- 4) It helps the readers to activate their awareness of the subject. So the readers' concentration more focus.

Same as other technique, Predictive reading technique also has some weaknesses.

Some of the weaknesses are:

- 1) The teacher find it is difficult to select reading materials which are accompanied with suitable picture.
- The teaching learning activity is still dominated with clever student and others can not be independent.

2.2.8 Procedure of Using Predictive Reading Technique

According to Bastidas (1984: 20) there are 8 steps of teaching reading comprehension through Predictive Reading technique. Then the researcher modified the steps as follow:

1. Pre-activity

a. The students are introduced the topic and given background knowledge related to the topic by asking some questions.

Here are the examples:

T: "Students, Do you know what narrative text is?"

S: "Yes, I do Miss."

T: "What do you know about narrative text?"

S: "Narrative is a kind of text which use past tense."

b. The students are introduced predictive reading technique and the teacher explain the role.

Here are the examples:

T: "Students, today we are going to learn about narrative text. I am sure that all of you have already know about narrative text because you have learnt it in SMP."

S: "It is alright, Miss"

T: "Today, I want to use PR technique in teaching this narrative text. In applying PR technique, you have to predict a text by using a picture.

2. Whilst-activity

a. The students are introduced the material by giving some pictures, and they have to guess what the picture is about. To help the students, the teacher give some clues.

For example:

T: "This story basically is one of fairy tales. It is telling about a girl that sufferred by her step mother and sister, then the girl in the story has a message that she has to go home at midnight."

b. The students are asked about the story according to the pictures to encourage their background knowledge.

For example:

T: "What do you think about the picture? Who were involved in the story?"

S: "I believe that the picture is interesting enough. In the picture there are two women and one man."

T: "That's true."

c. The students are given a gapped text (incomplete text). They should do it with their pair group and they should complete it using the extra clues that have been given.

For example:

T: "Now, you should work in pair and look at the text. fill the incomplete text with your partner, based on the clues."

S: "Yes, we will surely do Miss."

d. One student is called to present their answer and read the whole text.

For example:

T: "Now I will call a name and that students have to present their answer by reading the whole text."

S: "It's alright, Miss."

T: "Doni, come here please. What is the answer of question number

2? how is the character of the Cinderella?"

S: "She is a good girl. She is kind."

3. Post-activity

a. The students make conclusions about the text that they have already learned.

Here are examples:

T: "Students, after reading the whole text, what do you think about it?"

S: "I think cinderella is a kind girl, and her sister also her mother is cruel."

b. The students and teacher ended the class.

For example:

T: "This is the end of the class. It is enough for today. See you."

S: "See you Miss, thank you."

2.2.9 Theoretical Assumption

In line with the explanation of NHT and PR technique above, there is possible a significant difference in the students' reading comprehension achievement after being taught through NHT and PR technique. The reason is because both technique have their own strength and weaknesses. Therefore, it is assumed that if those technique are compared, there will be a difference in the result. Presumably, NHT technique is considered to be a better technique for students' reading comprehension. This is because NHT technique emphasize in making the students

able to comprehend text clearly and quickly since it has a few effective steps such as: numbering, asking question, thinking together and answering.

In brief, this chapter is elaboration of the previous chapter. This chapter discusses about the review of previous studies, concept of reading comprehension, concept of NHT technique, strengths and weaknesses of NHT technique, procedures of using NHT technique, concept of predictive reading, strengths and weaknesses of predictive reading, procedures of using predictive reading, and theoretical assumption. It is hoped that this research will be success.

III. METHODS OF THE RESEARCH

This chapter discusses the research design, subjects of the research, variables,

research instruments, validity, reliability, data collecting technique, data analysis

technique, and hypothesis testing.

3.1. Design of The Research

In this subchapter, the research design is explained. This research was a

quantitative research. It intended to find out whether there was any significant

difference in students' reading comprehension achievement between those who

were taught through NHT technique and PR technique and what aspect which

improved the most in each class. The design which was used in this research was

quasi experimental design.

There was two classes in this study; experimental class which was given a

treatment by using NHT technique and control class by using PR technique. Both

classes received pre test and post test. Pretest was administered to see the

students' basic ability within both groups in order to ensure that their ability is

equal before treatments. Then, after giving the treatments in both groups

the post test was administered . The design is presented as follows:

G1 = T1 X1 T2

G2 = T1 X2 T2

36

It can be comprehended that

G1 refers to experimental class

G2 denotes to control class

T1 relates to pre test

T2 denotes post test

X1 is concerned with treatment 1 which is NHT technique

X2 is concerned with treatment 2 which is PR technique

(Setiyadi 2006:132)

3.2 Population and Sample

A population is defined as the whole subjects of the research. Setiyadi (2006:38) states that research population is all individuals which are being targeted in research while research sample is individual who gives the data. The population of this research was the first grade students of SMA N 1 Gedong Tataan. For the sample of this research, two classes were used as samples. Students of X Ipa 5 and X Ipa 6 were used with X Ipa 5 which consist of 29 students for the experimental class and X Ipa 6 which consist of 28 students for the control class. The criterion for determining the sample was the students who have been taught about reading comprehension especially for narrative text but they had not applied any specific strategy or technique related to NHT and PR technique. The pre-test was used to see the students' reading comprehension mastery before the treatment, and the post-test was used to see the reading ability after conducting the treatment.

3.3 Variables

In order to assess the influence of the treatments in this research, variables can be defined as dependent and independent variables. Hatch and Farhady (1982) state that the independent variable is a major variable that researcher hopes to investigate; the dependent variable is the variable that is observed and measured to determine the improvement of the effect of the independent variable. This research was concerned with:

- 1) Students' reading comprehension achievement was as a dependent variable (Y), because this variable was observed and measured to determine the effect of independent variable.
- 2) NHT and PR techniques were independent variables (X) because these variables could influence or have effect to the dependent variable.

3.4. Instruments of the Research

The Instrument of this research was reading comprehension test. The reading test was conducted to find out how far teaching reading comprehension through NHT and PR technique. The test contained five aspects of reading main idea, specific information, inference, reference, and vocabulary. The test was given in a form of multiple-choice (a, b, c, d and e). Multiple-choice test is used since its marking is rapid, simple and most importantly reliable, that is, not subjective or influenced by marker judgments (Heaton, 1975: 151). The multiple-choice format make whquestions easier to answer than no-choice wh-questions because they give the students some possible answers. Students might be able to check the text to see if any of the choices were specifically discussed and then make a choice.

Here is an example of research instrument in this study:

Direction:

Choose the right answer by crossing A, B, C, D, or E!

Text 1

Read the following text to answer questions number 1 to 10!

- 1. What is the story about?
 - A. a wrath son
 - B. west Java's tales
 - C. Tumang a dog husband
 - D. the legend of Tangkuban Perahu
 - E. Dayang Sumbi's rejection to marry Sangkuriang

3.5. Validity

Validity refers to the extent to which the test measures what is intended to measure. This means that it relates directly to the purpose of the test (Shohamy, 1985:74). There are four types of validity, namely face validity, content validity, construct validity, and empirical validity or criterion-related validity. To measure whether the test has a good validity, the writer used content validity and construct validity. Face validity concerns with the layout of the test while the criterion related validity is concerned with measuring the success in the future, as in replacement test (Hatch and Farhady, 1982:251). So these two validities were considered to be less needed. Therefore, the two types of validity used in this research as follows:

a. Content Validity

Content validity is intended to know whether the test items are good reflection of what will be covered. The test items are adapted from the materials that have been taught to the students should be constructed as to contain a representative sample of the course (Heaton,1988). To get the content validity of reading comprehension, the researcher tries to arrange the materials based on the standard competence in the syllabus for first grade of senior high school students. This study used narrative text that is supposed to be comprehended by the first grade of senior high school students. In order to establish the content validity of measuring instrument, the overall contents are identified and analyzed.

In this research, scoring criteria was based on the five aspects of reading, i.e. determining main idea, finding the detail information, reference, inference, and vocabulary (Nuttal, 1985). In this research inter-rater was used to measure the validity. The test items were selected by the raters. All test items which have good validity are used to collect the data for this research.

b. Construct Validity

Construct validity concerns whether the tests are true reflection in line with the theory of what it means to know the language (Shohamy, 1985:74). If a test has construct validity, it is capable of measuring certain specific characteristics in accordance with a theory of language behavior and learning. This type of validity assumes the existence of certain learning theories or constructs underlying the acquisition of abilities and skills (Heaton, 1988:161). According to Nuttal's theory in which the construct validity in this instrument represented by five aspect of

reading in terms of macro skills:determining main idea, finding the detail information, reference, inference, and vocabulary.

3.6 Reliability

Reliability is how consistent the results are when the experiment is repeated a number of times under same methodological conditions, then the instrument is said to be reliable. Shohamy (1985:70) states that reliability refers to the extent to which the test is consistent in its score, and it gives an indication of how accurate the test score. To determine the reliability of the test, the researcher used split-half method since this formula is simple to use because (1) it avoid some troublesome correlations and (2) in addition to the number of item in the test, it involves only the test, mean and standard deviation, both of which are normally calculated anyhow as a matter of routine (Heaton, 1991: 164). To use split-half method, the researcher classified the test items into two similar parts, i.e. odd and even numbered. By splitting the test into two equal parts, it is made as if the whole test have been taken twice. Pearson Product Moment was used to measure the coefficient of the reliability between odd and even group (reliability of half test), the formula is as follows:

$$\mathbf{r}_{xy=} \quad \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{[N \sum x2 - (\sum x)2][N \sum y2 - (\sum y)2]}}$$

Where;

 r_{xy} relates to the correlation coefficient of reliability between odd and even N relates to the number of students who take part in the test X refers to the total numbers of odd number items

Y refers to the total numbers of even number items

 X^2 denotes to the square of x

 Y^2 denotes to the square of y

 $\sum x$ is concerned with the total score of odd number items

 \sum y is concerned with the total score of even number items

(Henning, 1987: 60)

To know the coefficient correlation of whole items, the writer used Spearman Brown's Prophecy Formula (Hatch and Farhady, 1982: 246). The formula is as follows:

$$r_{k} = \frac{2(rxy)}{1 + rxy}$$

It can be noticed that

 r_k refers to the reliability of the test.

r_{xy} designates to coefficient of reliability between the first half and the secondhalf items.

Therefore, the standards of reliability are as follows:

- A. A high reliability ranges from 0.90 to 1.00.
- B. An average reliability ranges from 0.50 to 0.89.
- C. A low reliability ranges from 0.00 to 0.49.

3.7 Data Collecting Technique

The instrument of this research was reading test. It consist of two kinds, pre test and post test. In this research, reading texts are used in giving treatments. The texts were taken from English book for senior high school and Internet. In collecting the data, this research used procedures which can be describe as follows:

(1) Pre test

Pre test is administered to both experimental groups in order to find out the quality of students' reading comprehension achievement from the class before applying the treatments.

(2) Post test

Post test is given after applying the treatments. The post test is given in order to know the result of students' reading comprehension achievement after applying the NHT and PR techniques.

3.8 Research Procedures

This research conducted based on the following procedures:

1. Determining the Sample

Two classes in the first year of SMA Negeri 1 Gedong Tataan were taken as the sample of this study. The sample was taken by the suggestion from the teacher.

2. Selecting the Material

Appropriate material based on the syllabus and also considering the result of pretest was chosen in this study. The material was in the form reading.

3. Administering the Pre-test

In this study, the pre-test was administrated in order to measure the students' reading skills achievement before being taught through NHT and PR techniques.

The pretest was originally in form of reading test which is in multiple choice in 40 items in 60 minutes.

4. Conducting the treatment

The treatment applied NHT technique to the experimental class, while control class used PR technique. In this research, each treatment applied in three meetings with 90 minutes in everymeeting.

5. Administering Post-test

The post-test was given to the students in experimental and control classes after the treatment of teaching reading comprehension achievement through NHT and PR techniques. It was used 40 items of multiple-choice tests with five options (A, B, C, D and E).

6. Analyzing Data

After conducting pre-test and post-test, the data was analyzed by using T test and Anova. T test was used to know whether there is any significant difference between NHT and PR technique in students' reading comprehension achievement of narrative text, while anova was used to know which aspect improve the most in each class. It was computed through SPSS.

3.9 Data Analysis

In order to know the students' progress in comprehending the text, the students' scores computed by doing two activities:

1. Scoring systems of the pre-test and post-test.

44

2. Tabulating the result of the test, and finding the mean of pre-test and the post-

test.

3. Comparing the result of pre test and post test. The data was computed through

SPSS by using independent group T-test.

4. Analyzing the aspects which improve in each class by using Anova and

Repeated Measures T-test in SPSS and drawing the conclusion.

3.10 Hypothesis Testing

The data analyzed in order to find out whether there is an increasing in students'

reading comprehension of narrative text after applying the NHT and PR

technique.

The hypothesis of this research are:

H₀ indicates that there is no significant difference of students' reading

comprehension between those who are taugh through NHT technique and those

who are taught through PR technique.

H₁ means that there is a significant difference of students' reading comprehension

between those who are taugh through NHT technique and those who are taught

through PR technique.

With the criteria:

If the t-ratio is higher than t-table: H₁ is accepted

If the t-ratio is lower than t-table : H₀ is accepted

V. CONCLUSIONS AND SUGGESTIONS

This chapter presents conclusions that are based on the research's result in the previous chapter. It also presents some suggestions for English teachers and other researchers who want to try to apply NHT and PR technique in the teaching reading.

5.1 Conclusions

In reference to the previous chapter, points of conclusion are drawn as follows:

- 1. There is a significant difference between students who are taught through NHT technique and those who are taught through PR technique as seen from the result of the hypothesis which shows that the p is smaller than 0.05 (0.000<0.050). In experimental class which applied NHT technique, there was increase 753 point for the total point after being given the treatments through NHT technique. While in PR class, there was increase 456 point. In addition, NHT technique is better than PR technique because NHT technique seemed to give higher effect in students' score than PR technique, especially in students' reading comprehension of narrative text.
- 2. The results of this research revealed that all the aspects of reading skills that improved the most in terms of macro skills in each class ranging from the highest to the lowest aspects are:

- 2.1 In experimental class, all the reading aspects which improved the most ranging from the highest to the lowest are:
 - 2.1.1 Vocabulary aspect improved significantly because the sig. is lower than the significancy level (p<0.050). Vocabulary aspect's sig. is 0.028 which means the aspect improve significantly. Vocabulary aspect improved significantly because the students could answer the questions correctly about the synonym and antonym based on the text.
 - 2.1.2 Reference aspect improved slightly; in other words it did not improved significantly because the sig. is higher than the significantly level (p>0.050). This sig. of this aspect is 0.556.
 - 2.1.3 Main idea aspect not improved significantly since the significancy of this aspect is 0.497; higher than the significancy level(0.050).
 - 2.1.4 Specific information improved slightly by looking at the gain.
 The significanct score of this aspect is 1.000; higher than the significancy level. This aspect improved but did not improve significantly.
 - 2.1.5 Inference aspect improved but not significantly since the significant score of this aspect is 1.000 which is higher than the significancy level(0.050).
- 2.2 In control class, all the reading aspects which improved the most ranging from the highest to the lowest are:

- 2.2.1 Vocabulary aspect improved but not significantly because the sig. is higher than the significancy level (p>0.050). Vocabulary aspect's sig. is 0.734 which means the aspect did not improve significantly.
- 2.2.2 Reference aspect improved slightly by looking at the gain. It did not improved significantly because the sig. is higher than the significantly level (p>0.050). This sig. of this aspect is 1.000.
- 2.2.3 Specific information improved but not significant because the significant score of this aspect is 1.000; higher than the significancy level.
- 2.2.4 Inference aspect improved but not significantly. The significant score of this aspect is 1.000 which is higher than the significancy level(0.050).
- 2.2.5 Main idea aspect not improved significantly because the sig. of this aspect higher than the significantly level. The sig. of this aspect is 1.000, which is higher than the significancy level(0.050).

In sum, it could be concluded that there is a significant difference in students' reading comprehension achievement between those who are taught through NHT and those who are taught through PR technique. It also found that NHT technique is better than PR technique for teaching reading comprehension. Moreover, the aspect which improved the most in both classes is vocabulary aspect but in control class the aspect not improved significantly while in experimental class it improved significantly.

5.2 Suggestions

Referring to the points of conclusion above, some suggestions can be listed as follows:

5.2.1. Suggestions for teacher

5.2.1.1 Since the students have the lowest score in making inference, it is necessary for the teacher to increase students' understanding of making inference by explain what inference is and how to make an inference in a text.

5.2.1.2 It is also necessary for the teacher to increase students' comprehending about finding main idea by doing some activities: for example, the teacher gives the students lesson about how to find main idea and make a list of some clue about the text.

5.2.2 Suggestions for further researchers

5.2.2.1 For the further researcher who want to conduct the similar research, should aware of the time allocation for the treatments. It is because of the time limitation. The target material may not be explained fully when the class is in crowded.

REFERENCES

- Bastidas, J. (1984). *The cloze procedure as teaching technique*. Washington: Forum Vol XII April.
- Brown, H. D. (2004). *Language assessment: Principles and classroom practices*. White Plains, NY: Pearson Education.
- Durkin, D. (1993). Teaching them to read (6th Ed.). Boston: Allyn& Bacon.
- Evinda, Z. (2009). A comparative study of students' reading comprehension achievement between students who are taught through predictive reading technique and those through conventional technique at the first year of SMA Al Huda Jatimulyo Lampung Selatan. Unpublished script. Bandar Lampung: Lampung University.
- Hatch, E., & Farhady, H. (1982). Research design and statistic for applied linguistic. London: New Burry House, Inc.
- Heaton, J. B. (1975). Writing English Language Tests: A Practical Guide for Teachers of English as a Second or Foreign Language (Longman Hadbooks for Language Teachers). UK: Longman Group United Kingdom.
- Heaton, J. B. (1988). Writing english language test. New York: Longman Group UK Limited.
- Henning, G. (1987). A guide to language testing. Massachusetts: Newbury House Publishers.
- Ibrahim, M. (2000). *Pembelajaran cooperative*. Surabaya: Universitas Negeri Surabaya.
- Irawan, P. (2011). Improving students' reading comprehension using numbered heads together (NHT) (a classroom action research conducted in the eleventh grade of SMA Negeri Colomadu Karang anyar in the academic year 2010/2011. Surakarta: Sebelas Maret University.
- Kagan, S. (1986). Cooperative learning and sociocultural factors in schooling. Los Angeles: California State University.
- Kagan, S. (1992). *Cooperative learning*. New York: Prentice Hall.
- Khalaji, H. R. (2012). The Impact of Reading Strategy Training on the Reading Comprehension of Iranian EFL Learners. Academy Publisher. Vol. 3, No.1,

- pp.135-140.
 - Retrieved from: http://www.researchgate.net/profile/Karim_Vafaeeseresht/p ublication/259780710_The_Impact_of_Reading_Strategy_Training_on_the _Reading_Comprehension_of_Iranian_EFL_Learners/links/0deec52dd56ab 250 c1000000.pdf.
- Lie, A. (2003). *Cooperative learning*. Jakarta: PT Gramedia Widiasarana Indonesia.
- Markstein, L., & Hirasawa, L. (1982). *Expanding reading skills*. Massachusets: Newbury House Publisher.
- Masruroh. (2011). Improving students' reading comprehension using numbered heads together technique at the tenth grade of SMAN 1 Cerme. Gresik: University of Muhammadiyah Gresik.
- Nuttal, C. (1985). *Teaching reading skills in a foreign language*. London: British Library Cataloguing in publication data.
- Nuttal, C. (2000). *Teaching reading skills in a foreign language*. Oxford: Macmillan Publishers Limited.
- Setiyadi, A. B. (2006). *Metode Penelitian untuk Pengajaran Bahasa Asing*. Yogyakarta: Graha Ilmu.
- Shohamy, E. (1985). A practical handbook in language testing for the second language teachers. New York: Holt Renehart and Winston.
- Snow, C. E. (2002). Reading for understanding: Toward a Research and Development Program in Reading Comprehension. Santa Monica: RAND: Reading Study Book.
- Tileston, D. W. (2004). What every teacher should know about effective teaching strategies. London: Corwin Press.
- Vista, A. B. P. (2018). Improving students' reading comprehension ability of narrative text through know-want-learned (KWL) strategy at SMPN 1 Gedung Surian West Lampung. Unpublished script. Bandar Lampung: Lampung university.