

## A COMPARATIVE STUDY BETWEEN BRAINSTORMING AND OUTLINING TECHNIQUE IN STUDENTS' DESCRIPTIVE WRITING ABILITY AT GRADE XI OF SMA N 7 PADANGSIDIMPUAN

#### A THESIS

Submitted to State Institute for Islamic Studies Padangsidimpuan as a Partial Fulfillment of the Requirement for the Graduated Degree of Islamic Education (S.Pd.I) in English

#### By:

SHABRINA RASYID MUNTHE Reg. No. 11 340 0079

## ENGLISH EDUCATION DEPARTMENT

TARBIYAH AND TEACHER TRAINING FACULTY STATE INSTITUTE FOR ISLAMIC STUDIES PADANGSIDIMPUAN 2015



## A COMPARATIVE STUDY BETWEEN BRAINSTORMING AND OUTLINING TECHNIQUE IN STUDENTS' DESCRIPTIVE WRITING ABILITY AT GRADE XI OF SMA N 7 PADANGSIDIMPUAN

#### A THESIS

Submitted to State Institute for Islamic Studies Padangsidimpuan as a Partial Fulfillment of the Requirement for the Graduated Degree of Islamic Education (S.Pd.I) in English

#### By:

#### SHABRINA RASYID MUNTHE Reg. No. 11 340 0079

#### **ENGLISH EDUCATION DEPARTMENT**

## TARBIYAH AND TEACHER TRAINING FACULTY STATE INSTITUTE FOR ISLAMIC STUDIES PADANGSIDIMPUAN 2015

Term : Thesis a.n. Shabrina Rasyid Munthe Item : 7 (seven) exemplars

Padangsidimpuan, 20 November 2015 To : Dean Tarbiyah and Teacher Training Faculty in – Padangsidimpuan

Assalamu'alaikumWr. Wb.

After reading, studying and giving advice for necessary revision on thesis belongs to Shabrina Rasyid Munthe, entitle "A Comparative Study Between Brainstorming and Outlining Technique in Students' Descriptive Writing Ability at Grade XI of SMA N 7 Padangsidimpuan", we assume that the thesis has been acceptable to complete the assignment and fulfill for the degree of Islamic Educational Scholar (S.Pd.I) in English, Tarbiyah and Teacher Training Faculty in IAIN Padangsidimpuan.

Therefore, we hoped she could be defined her thesis in Munaqosyah. That is all and thanks you for the attention.

Wassalamu'alaikumWr. Wb.

Advisor I

Rayendriani Fahmei Lbs, M.Ag NIP.19710510 200003 2 0021

Advisor II Sojuangon Rambe, S.S., M. Pd NIP. 19790815 200604 1 003



## A COMPARATIVE STUDY BETWEEN BRAINSTORMING AND OUTLINING TECHNIQUE IN STUDENTS' DESCRIPTIVE WRITING ABILITY AT GRADE XI OF SMA N 7 PADANGSIDIMPUAN

#### A THESIS

Submitted to State Institute for Islamic Studies Padangsidimpuan as a Partial Fulfillment of the Requirement for the Graduated Degree of Islamic Education (S.Pd.I) in English

> By: SHABRINA RASYID MUNTHE Reg. No. 11 340 0079 /



Advisor I

Advisor 🎵

Kyflubi

Rayendriani Fahmei Lubis, M.Ag NIP. 19710510 200003 2 001 Sojuangon Rambe, S.S., M.Pd NIP. 19790815 200604 1 003

ENGLISH EDUCATION DEPARTMENT TARBIYAH AND TEACHER TRAINING FACULTY STATE INSTITUTE FOR ISLAMIC STUDIES PADANGSIDIMPUAN 2015

#### **DECLARATION OF SELF THESIS COMPLETION**

The name who signed here:

Name	: SHABRINA RASYID MUNTHE
Reg. No.	: 11 340 0079
Faculty/Department	: Tarbiyah and Teacher Training Faculty/ TBI-2
Title of Thesis	: A COMPARATIVE STUDY BETWEEN BRAINSTORMING AND OUTLINING TECHNIQUE IN STUDENTS' DESCRIPTIVE WRITING ABILITY AT GRADE XI OF SMA N 7 PADANGSIDIMPUAN.

I hereby declare that I have arranged and written the thesis by myself, without asking for illegal help from others except the guidance from advisors, and without doing plagiarism as it in students' ethic code of IAIN Padangsidimpuan article 14.

I do this declaration truthfully, if here is deceitfulness and incorrectness degrading to this declaration in the future, I will be willing to get punishment as it is required in students' academic degree disrespectfully, and other punishment regarding norms and legal law.

DF546166078

Padangsidimpuan, December 2015

Declaration Maker

Antoge

SHABRINA RASYID MUNTHE Reg. No. 11 340 0079

## AGREEMENT OF PUBLICATION OF FINAL TASK FOR ACADEMIC CIVITY

As Academic Cavity of The State Institute for Islamic Studies Padangsidimpuan, the name who signed here:

Name	:	: SHABRINA RASYID MUNTHE	
Nim	:	11 340 0079	
Faculty/Department	:	Tarbiyah and Teacher Training Faculty / TPL	
Kind	1	Thesis	

To develop science and knowledge, deflagrate for giving to The State Institute for Islamic Studies Padangsidimpuan Non Exclusive Royalty Right on my thesis with rhe title:

### "A COMPARATIVE STUDY BETWEEN BRAINSTORMING AND OUTLINING TECHNIQUE IN STUDENTS' DESCRIPTIVE WRITING ABILITY AT GRADE XI OF SMA N 7 PADANGSIDIMPUAN"

With all the sets of equipment (if needed). Based on the this non exclusive royality right, The Institute Islamic Studies Padangsidimpuan has the right to save, format, organize in data base form, keep and publicate my final task as long as I determine as a write and own creative right.

Above all, thus statement is made true heartedly to be used property.

Made In Padangsidimpuan

Date, December 2015

The signed

DJP

Hart 3.J.

SHABRINA RASYID MUNTHE Reg. No. 11 340 0079

#### EXAMINERS

#### SCHOLAR MUNAQOSYAH EXAMINATION

: SHABRINA RASYID MUNTHE

Members.

Name Reg. No Faculty/Department

: 11 340 0079: Tarbiyah and Teacher Training Faculty/English Education Department

Thesis

A COMPARATIVE STUDY BETWEEN BRAINSTORMING AND OUTLINING TECHNIQUE IN STUDENTS' DESCRIPTIVE WRITING ABILITY AT GRADE XI OF SMA NEGERI 7 PADANGSIDIMPUAN

nief

Dr. Lelya Hilda, M.Si NIP. 19720920 200003 2 002 Secretary,

Eka Sustri Harida, M. Pd NIP. 19750917 200312 2 002



1. Dr. Lelya Hilda, M.Si NIP. 19720920 200003 2 002

## MA

3. Sojuangon Rambe, S.S., M.Pd NIP. 19790815 200604 1 003

Proposed:

Place: PadangsidimpuanDate: December, 29<sup>th</sup> 2015Time: 14:00 WIB - finishResult/Mark: 72.75 (B)IPK: 3.58Predicate: Cumlaude

AFF

 Eka Sustri Harida, M. Pd NIP. 19750917 200312 2 002

# 4

4. Hamka, M.Hum NIP. 19840415 200912 1 005



#### RELIGION MINISTRY THE STATE INSTITUTE FOR ISLAMIC STUDIES PADANGSIDIMPUAN TARBIYAH AND TEACHER TRAINING FACULTY Address: Jl. HT. Rijal Nurdin, Km. 4,5Sihitang Telp. (0634) 22080 Faximile (0634) 24022

#### **LEGALIZATION**

Thesis

#### : A COMPARATIVE STUDY BETWEEN BRAINSTORMING AND OUTLINING TECHNIQUE IN STUDENTS' DESCRIPTIVE WRITING ABILITY AT GRADE XI OF SMA N 7 PADANGSIDIMPUAN

Name

: SHABRINA RASYID MUNTHE

Reg. No. : 11 340 0079

Faculty/Department

: Tarbiyah and Teacher Training Faculty/ English Department

The thesis has been accepted as a partial fulfillment of requirement for degree ofIslamic Educational(S.Pd.I) in English.

Padangsidimpuan, Februari 2016 Dean Tarbiyah and Teacher Training aculty ADANGSIC HIMMA, S.Ag., M.Pd NIP. 19720702 199703 2 003

Name	: Shabrina Rasyid Munthe			
Register Number	: 11 340 0079			
Faculty	: Tarbiyah and Teacher Training Faculty			
Department	: English Education			
The Title of the Thesis	: A Comparative Study between Brainstorming			
	Technique in Students' Descriptive Writing			
	Ability at Grade XI of SMA N 7			
	Padangsidimpuan			

#### ABSTRACT

This research concerned about the comparative study of students' writing ability by using brainstorming technique and outlining technique at Grade XI of SMA N 7 Padangsidimpuan. The problems of this research were most of students the ability students' writing skill low, the students' low achievement in writing which have no technique in writing. The purpose of this research was to find out the difference between brainstorming technique and outlining technique in students' descriptive writing ability at grade XI of SMA Negeri 7 Padangsidimpuan.

This research employed experimental research. The population of this research was the eleventh grade of SMA N 7 Padangsidimpuan. The total of population is 5 classes. Then, the sample of the research was 2 classes, experiment class 1 (XI.IA-1) experiment class 2 (XI.IA-2). It was taken randomly after conducting normality and homogeneity test. To collect the data, researcher used test for measuring students' ability in writing descriptive text. To analyze the data, the researcher used t-test.

Based on the result of the research, researcher shown the description of the data was found that the result of experimental class was higher than control class (2,745>2,675), and the score of  $t_{count}$  was bigger than  $t_{table}$  (26,928> 1,68). It meant that the hypothesis alternative (H<sub>a</sub>) was accepted. It was concluded that there was the difference between students' descriptive writing ability by using brainstorming technique and outlining technique at Grade XI of SMA N 7 Padangsidimpuan.

#### ACKNOWLEDGEMENT بسم الله الرحمن الرحيم

First of all, I would like to say thank you to Allah the Almighty who has given me time and healthy in finishing this thesis. Next, I do not forget to send Shalawat to our Prophet Muhammad SAW who has guided us to have good life.

This thesis is presented to the English Department of the State Institute for Islamic Studies (IAIN) Padangsidimpuan as a Partial Fulfillment of the Requirement for the Degree of Islamic Education Scholar (S.Pd.I).

In finishing this thesis, I got a lot of advices, suggestion, and aids from the following:

- Dr. H. Ibrahim Siregar, MCL, is as the Rector of State Institute for Islamic Studies Padangsidimpuan.
- 2. Mrs. Hj. Zulhimma, S.Ag, M.Pd, is as the dean of Tarbiyah and Teaching Training Faculty.
- 3. Mrs. Rayendriani Fahme: Lubis, M.Ag, is as the Leader of English Department.
- 4. All lecturers and staff of IAIN Padangsidimpuan who have given their valuable, advice, and cooperative.
- 5. Mrs. Nursyawiyah Hutauruk, M.Pd is as the head master of SMA Negeri 7 Padangsidimpuan, who has helped to complete this research as well as his students for the helping, has given to me.
- 6. My beloved parent (Abdul Rahmad Munthe and Siti Mariyam Ms S.Pd.I), my beloved brothers (Ibnu Rasyid Munthe S.T M.Kom and Adnan Rasyid Munthe S.E) and my best friend F Rambe who always give their materials, prays motivation, and moral encouragement to finish my studying.

viii

- My beloved senior; Desi Afridah S.Pd.I, Annasari Rangkuti S.Pd.I. My beloved friends
   Ismi Ruqqayyah Asral, Yanti Rohani, Hamimah Saragih, Cici Hafsyah Sipahutar, Syarifah Aisyah Simamora, Ita Purnama Sari, Sefrina, Yaspiah, Yeni and especially all of TBI-2 thanks' for your help, patient and attention to support to finish my writing.
- 8. All my friends in IAIN Padangsidimpuan, good luck for you.
- All the people who have helped the writer to finish my study that I can't mention one by one.

May Allah, The Almighty bless them all, Amin.

Padangsidimpuan,20November 2015

Declaration maker

<u>Shabrina Rasyid Munthe</u> Reg. No. 11 340 0079

#### TABLE OF CONTENTS

Pages

#### TITLE PAGE ADVISOR'S LEGALIZATION PAGE ADVISOR'S DECLARATION PAGE DECLARATION LETTER OF WRITING OWN PAGE AGREEMENT OF PUBLICATION OF FINAL TASK FOR ACADEMIC CIVITY PAGE MUNAQOSYAH EXAMINATION PAGE LEGALIZATION OF DEAN TARBIYAH AND TEACHER TRAINING FACULTY PAGE

ABSTRACT	i
ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	iv
LIST OF FIGURES	v
LIST OF APPENDIXES	vi

#### **CHAPTER I. INTRODUCTION**

A. The Background of the Problem	1
B. The Identification of the Problem	5
C. The Limitation of the Problem	6
D. The Formulation of Problem	6
E. The Research Objective	7
F. The Significances of the Research	7
G. The Definition of the key terms	8
H. The Outline of the thesis	9

#### **CHAPTER II. THEORETICAL DESCRIPTION**

A. The Descri	ption of Writing	
1. Wr	iting	11
2. The	e process of writing	12
3. Kin	ds of writing	13
4. The	e assessment criteria of writing	13
B. Descriptive	e Text	
1. Cor	ncept of descriptive text	15
2. Typ	bes of description	15
3. Soc	tial function of descriptive text	16
4. The	e generic structure of descriptive text	16

5. Language feature	17
6. Example of descriptive text	17
C. Brainstorming Technique	
1. Definition of brainstorming technique	18
2. Brainstorming principle	19
3. Goal and objective	20
4. Procedure of teaching	20
D. Outlining Technique	
1. Definition of outlining technique	21
2. Goal and objective	22
3. Procedure of teaching	22
E. Related Findings	23
F. The Conceptual Framework	25
G. Hypothesis	27
CHARTER III DESEARCH METHODOLOCY	
CHAPTER III. RESEARCH METHODOLOGY	20
P. The Descerch Design	20
D. The Research Design	20
D. The Instrument of Collecting Date	29
D. The Instrument of Conecting Data	32 26
E. The Procedure of Research	<b>30</b>
F. The Technique of the Data Analysis	38
CHAPTER IV. DESCRIPTION OF THE DATA AND DISCUSSION	
A. Description of the Data	42
1. Description data of pre-test	42
2. Description data of post-test	46
3. Hypothesis test of pre-test	50
4. Hypothesis test of post-test	52
B. Discussion	55
C. Threats of the Research	56
CHAPTER V. CONCLUSION AND SUGGESTION	
A Conclusion	57
B Suggestion	57
D. 545505001	51
REFERENCES	
CURRICULUM VITAE	
APPENDIXES	

#### LIST OF TABLES

Table I	Population of Research	Page 29
Table II	Sample of The Reseach	31
Table III	Design of Instrument	33
Table IV	The Indicator of Writing Descriptive Text	35
Table V	The Score of Experimental Class in Pre-Test	41
Table VI	The Frequency Distribution of Students'Score in Exprimental	42
Table VII	The Score of Control Class in Pre test	44
Table VIII	Frequency Distribution of Students' Score	44
Table IX	The Score Experimental Class in PostTest	45
Table X	Frequency Distribution of Students' Score	46
Table XI	The Score of Control Class in Post Test	47
Table XII	The Frequency Distribution of Student' Score	48

#### LIST OF FIGURES

Figure 1	The Histogram of Students' Score in Experimental Class for Pre-		
	Test	43	
Figure 2	The Histogram of Students' Score in Control Class for Pre-Test	45	
Figure 3	The Histogram of Students' Score in Experimental Class for Post-		
	Test	47	
Figure 4	The Histogram of Students' Score in Control Class for Pre-Test	48	

#### LIST OF APPENDIXES

- Appendix 1 Lesson Plan of Experiment Class
- Appendix 2 Lesson Plan of Control Class

Appendix 3 Instrument of Test Validity for Pre-Test

Appendix 4 Instrument of Test Validity for Post-Test

Appendix 5 Score of Experiment class in Pre Test

Appendix 6 Score of Control Class in Pre Test

Appendix 7 Result of Normality test of Experimental Class Pre Test

Appendix 8 Result of Normality test of Control Class Pre Test

Appendix 9 Result of Normality test of Experimental Class Post Test

Appendix 10Result of Normality test of Control Class Post Test

Appendix 11Homogeneity Test of Pre Test

Appendix 12Homogeneity Test Post test

Appendix 13Table T-Test in Pre Test

Appendix 14Table T-Test in Post Test

Appendix 15Percentage of the t Distribution

- Appendix 16 Table Z- Score
- Appendix 17 Table Chi- Square
- Appendix 18 Photos Research

#### **CHAPTER I**

#### **INTRODUCTION**

#### A. The Background of the Problem

Writing is the primarily basic upon which our work, our learning and our intellect will be judged in college in the work place and in the community. Writing helps learn how to form language, how to spell, how to make a logical argument.Writing help to expressour thinking thoughts for other people. Writing could be a great tool to help to know more about the way our think.

Writing can solidify ideas and thoughts allow reflecting better than if the ideas remain evolving in our head. Writing is the process of giving information by text that involved in generating the letter word and sentences. We must have extensive knowledge if we want to write something and there are few reasons writing necessary in our life.

Based on the explanation above, writing is important skill in language learning. Writing skill is problematic at school Senior High School Negeri 7 Padangsidimpuan either in the aspect of achievement or motivation. The actual fact is revealed in the following my explanation.

The problem could be seen from the aspects such as he ability of students' writing skill low. Based on UU.Sidiknasno 23 tahun 2006,

passing grade of English in senior high school is 7.5 for all subject and skills includes writing skill. However the data found in SMA exampleSMAN 7Padangsidimpuan reveals the average of students' writing achievement of grade VII: 6.5, grade VIII: 6.7, and grade IX: 6.8.

The second, most of the student's could not write well. They did not have technique make easier. They just write without to attend spelling, grammar and punctuation. They may be confused what to write. The third, many students are lack of practice in writing to and lack of attention about the important of writing. They were more interest using social network and playing game online.

Accordingly, the problems above need to be solved in order to avoid flaws in students as product of education. That may behelp teachers and students in learning writewill be better in the future. There are some techniques that can enhance students' descriptive writing ability such as:

First, brainstorming technique is a useful technique in writing. According to Douglas Brown, "Brainstorming technique is useful technique in writing because it permits you to approach a topic with an open mind.<sup>1</sup>It permits you to approach a topic with an open mind. Second,outlining technique a list outline lets you work on, and see, the

<sup>&</sup>lt;sup>1</sup>H. Douglas Brown, *Teaching by Principles An Interactive Approach to Language Pedagogy, Second Edition*, (San Francisco State University, 2001), p. 349.

bare bones of your paper, without the distraction of a clutter of words and sentences. A list use to present the main points or topics of a given subject, often used as a rough draft or summary of the content of a document. Third, free writing technique it is design to help free ideas that might not realize that have. Aspect of free writing is that write without being concern about spelling, punctuation, or grammar. The last, working in a group in proceeding exercise worked individually, using brainstorming to establish own ideas, to follow own train of though. Another effective way to generate ideas is to work in small group where share brainstormed ideas with the rest of the group members.

Brainstorming technique a prewriting activity improves background knowledge. You write down any ideas or feelings you have about the subject of your topic exactly free writing technique is designed to help free ideas that might not realize that have. Aspect of free writing is that write without being concerned about spelling, punctuation, or grammar. Outlining technique a listused to present the main points or topics of a given subject, often used as a rough draft or summary of the content of a document. The outlining connects to writing description text exactly working in a group there are some members group do not give their ideas. From four alternatives techniques above, the researcherchooses to employ brainstorming and outlining technique. At least reason are available as background of the choice that is consideration of students learning materials, characteristics of the students and appropriateness of brainstorming and outlining technique. Below the researcher reveals the reason.

The first, it was found that student's learning material is writing ability low. Naturally, a passage consists of paragraph which builds an idea. Conceptually, brainstorming is a prewriting activity in which you write down any ideas or feelings you have about the subject of your topic. Accordingly, students' writing ability by brainstorming technique, a writer would be able to writing well.

The second, the background knowledge of students could to improve their writing skill. Background knowledge of a subject is knowledge of the principles and ideas of the subject rather than of the way the principles were put into practice. Besides, they also gave ideas concrete.Brainstorming technique is appropriate with their background knowledge cognition.

The third, an outline lets you work on, and see, the bare bones of your paper, without the distraction of a clutter of words and sentences. Conceptually outlining is an organizational skill that will develop your ability to think in clear and logical manner. According to JhonLangan, "Outlining technique is an organizational skill that will develop your ability to think in a clear and logical manner."<sup>2</sup>Students' writing ability by outlining technique, a writer would be able to writing well.

Writing description text is spatial organization for describe arrangement of item. The introductory paragraph gives general background information to introduce the topic. It was used technique would be better for easier the students.

In view of above discussion, the researcher was interested in conducting an comparative research of which purpose is to investigate the a comparative study brainstorming and outlining technique in students' descriptive writing ability at grade XI of SMA N 7 Padangsidimpuan.

#### **B.** The Identification of the Problem

Based on the background above, the problems concerning descriptive writing ability at SMA N 7 Padangsidimpuanare: 1) the ability students' writing skill low. 2) students' low achievement in writing which can be due to inappropriate writing technique, and 3) their lack of practicein writing.

<sup>&</sup>lt;sup>2</sup>JhonLangan, *College Writing Skills with Reading*, (McGraw-Hall:1985), p.100.

#### C. The Limitation of the problem

The coverage of the variables state above is so large in the matter of material, space and time that it is difficult to explore alone. Due to the limitation of the writer in the aspect of ability, time and finance, this research must be limited. Thus, this study is to investigate the causalcomparative relationship between brainstorming technique and outlining technique on writing ability of descriptive text, in Grade XI at Senior High School N 7 Padangsidimpuan. Other subjects left and related to this study can be the domain of the future researcher.

#### **D.** The Formulation of the Problem

Based on the background and identification of the problem above, there are two independent variables which compare one dependent variable which are to investigate. Brainstorming and outlining technique compare students' descriptive writing ability. This study would explore the difference result of descriptive writing ability caused by each technique. Accordingly the formulation of the problem: "is there compare between students' descriptive writing ability by using brainstorming technique and outlining technique in grade XI at senior high school N 7 Padangsidimpuan?"

#### E. The Research Objective

- 1. To describe the students' writing ability by using brainstorming technique.
- 2. To describe the students' writing ability by using outlining technique.
- 3. To examine whether there is difference between using brainstorming technique and outlining technique in students' descriptive writing ability at grade XI of SMA N 7 Padangsidimpuan.

#### F. The Significant of the Research

This research could give benefit at least in three domain, they were in education, for teachers and for future researchers. So, the significances could be described as follow:

The first, this research would add knowledge in education so science of language education could be wide and specifically in writing skill. This research was wide the sciences in research and the enrich subjects in education.

Second, this research gave the information or learning materials to the teachers. The teacher could add the material to teach it. The teachers could improve the learning strategy in the classroom. The teacher could choose the brainstorming and outlining technique to the students.

The last, this research could be benefit to the new researcher. They could add matters to complete the subject when they will do research. They would be easy to find out which are continuity of this research.

#### G. The Definition of Operational Variable

There were many variable of this research as follow.

- Comparative: is the process of comparing two or more thing (the both technique) and to see how they are how different or to be similar something which one better than anything else of the same kinds events, situation, etc.<sup>3</sup>
- 2. Brainstorming technique: is thinking quickly and without inhibition to develop a few buzz word and ideas.<sup>4</sup>
- Outlining technique: a list used to present the main points or topics of a given subject, often used as a rough draft or summary of the content of a document.
- 4. Writing ability achievement: writing grade which the students achieve at pre-test and post-test in experiment class and control class.

<sup>&</sup>lt;sup>3</sup>University of Oxford, *Oxford Advanced Learners' Dictionary or Current English* (New York: Oxford University Press, 2005) P.306.

<sup>&</sup>lt;sup>4</sup>Keith Johnson, *An Introduction to Foreign Language Learning and Teaching* (England: Person Education Limited, 2001) P. 289.

#### H. The Outline of the Thesis

The systematic of this thesis was divided into five chapters. Each chapter consist of many sub chapters with detail as follow:

Chapter one was about introduction, consist of background of the problem, identification of the problem, limitation of the problem, formulation of the problem, research objective, significant of the research, definition of operational variables, and outline of the thesis.

Chapter two was the theoretical description, which explain about: 1.) Descriptive writing ability, Consist of: types of writing, the aspect of descriptive writing ability. 2.) Brainstorming techniques consist of: defenition of brainstorming, principles of brainstorming technique. 3.) Outlining technique consist of: defenition of outlining technique, and the procedures of outlining technique. In chapter two also discuss about review related finding, conceptual frame work, and hypothesis.

In the chapter three, it was consist of research methodology. It consists of time and place of the research; This research will be dofrom since write proposal until finish this research. Population and sample; The Population of Grade XI Students of SMA Negeri 7 Padangsidimpuan and the sample is XI IA<sup>1</sup> and XI IA<sup>2</sup>. Instrument collecting data is test. Procedure of the research is pre-test, treatment, post-test. And the last the techniques of data analysis is  $t_{test}$ .

In the chapter four, it was the result of the research concern aboutdescription of data before using brainstorming technique and outlining technique and description of data after using brainstorming technique and outlining technique to students' descriptive writing ability, hypothesis testing, discussion and threats of the research.

Chapter five was the conclusion and suggestion.

#### **CHAPTER II**

#### THEORITICAL DESCRIPTION

#### A. The Description of writing

1. Writing

Writing can be a great tool to help you know more about the way you think.Wethink something ideas then we write on the paper.Writing is an activity for producing and expressing, it is producing the words and sentences thenexpress with meaning of ideas, thus writing is the activity to transfer the ideas through words and sentences then the ideas will change to the scientific.

According to David Nunan,Writing are both a physical and a mental act at the most basic level. On other hand, writing is the mental work of inventing of ideas, thinking about how to express them, and organizing them into statements and paragraphs that will be clear to a reader. It is also both a process and a product, the writer imagines, organizes, drafts, edits, reads and rereads, this is the process of writing is often cynical and sometimes disorderly, ultimately, what the audience sees, whether it is an instructor or a wider audience is a product an essay, letter, story or research report.<sup>1</sup>

Furthermore According to Olson, "writing is the process refers

to the act of gathering ideas and working with them until they are

<sup>&</sup>lt;sup>1</sup>David Nunan, *Practical English Language Teaching*, (America:The Mc Grow Hill Companies,2003), p.88.

presented in a manner that is polished and comprehensible to readers."<sup>2</sup>

Based on the explanation above, the writer concludes that, writing ability is result ideas to develop thinking mind, able to writing sentences and understand relation to the context. The reader's comprehension what the writer means.

#### 2. The process of writing

The process of writing is process which the writers need stages for work be better. Every writer follows his or her own writing process. Often the process a routine that comes naturally and is not a step-bystep guide to which writers refer. Being conscious of writer own writing process is especially helpful when writer find struggling with a particularly tricky piece.

There are five stages of writing process, they are:

- 1) Prewriting includes exploring topics, choosing a topic, and beginning to gather and organize details before you write.
- 2) Drafting, involves getting your ideas down on paper in roughly the format you intend for the finished work.
- 3) Revisingis the stage in which you rework your first draft to improve its content and structure.
- 4) Editing and proofreading, involve correcting errors in grammar spelling and mechanics.

<sup>&</sup>lt;sup>2</sup>Caroline T. Linse, *Practical English Language Teaching: Young Learners*, (McGraw-Hill Companies:2005), p.98.

- 5) Publishing and presenting, are the sharing of your work with other.<sup>3</sup>
- 3. Kinds of writing

A kind in writing determines the nature of the writing. Writers need specification of the kind in order to plan and compose a piece that responds to the task.More important to find out is what kinds of writing has been assigned. There are threekinds of writing will be expect to use become more writingintensive.According to Michael O' Malley that there are kinds of writing:

- 1) Expository or informativewriting to share knowledge and give information, directions, or ideas. Examples of informative writing include describing events or experiences, analyzing concepts, speculating on causes and effects, and developing new ideas or relationships.
- 2) Expressive/narrative writing is personal or imaginative expression in which the writer produces stories or essays. This is often based on observation of people, objects, and places and may include creative speculations and interpretations.
- 3) Persuasive writing, writers attempt to influence others and initiate action or change. This is often based on background information, facts, and examples the writer uses to support the view expressed.<sup>4</sup>
- 4. The assessment criteria of writing

The assessment criterion of writing is needed to recognize the criteria for writing assessment in the research study. There are some

<sup>&</sup>lt;sup>3</sup>Joyce Amstrong Carroll and Friends, *Writing and Grammar Communication in Action Platinum level*, (Prentice-Hall: New Jersey, 2001), p.3.

<sup>&</sup>lt;sup>4</sup>J. Michael O'Malley, *Authentic Assessment for English Language Learners*, (Addison-Wesley Publishing Company: 1996), p.137.

criteria of writing assessment. According to Arthur Hughes there are

some criteria of writing assessment.

1) Grammar

Garammar is the part of the study of language which deals with forms and stucture of word, with their costmary arragement in phase and sentence and often with language sounds and word meanings.

2) Vocabulary

There are many such sets of words which add greatly to our apportunities to express subbtle shades of meaning at various levels of style.

3) Mechanics

The criteria is talk about punctuation and spelling of the writing. In good writing is correct use of English writing conventions: left and right margins, all needed capitals, paragraph intended, punctuation and spelling.

4) Fluency

In fluency writing must be consistence between choose of structure with vocabulary and also both of them must be appropriate .

5) Form (organization)

In writing activity organization is one of the main assessments in writing ability. This criterion is identified introduction, body, and conclusion of writing task.<sup>5</sup>

#### **B.** Descriptive text

1. Concept of descriptive text

Descriptive text is a text describe and reveal a particular person,

place, or thing. According Hornby, "Descriptive is giving a picture in

word; without expressing feelings or judge. Text is the main written

<sup>&</sup>lt;sup>5</sup>Arthur Hughes, *Testing For Language Teachers*, (New York: Cambridge University Press, 1990), p. 91-93.

or printed part of a book or page, contrasted with notes illustration, etc."<sup>6</sup> Furthermore according to Malikatul Laila,"A descriptive text is a text which portrays the image of a certain thing from which a writer wants to transfer it to readers. Mostly descriptive texts depict or describe the image of a certain person, animal, things, and location or place."<sup>7</sup>

Base on explanation the researcher concluded descriptive text is describe about person, place or thing, location or place etc including sensory language, precise language, figurative language and a logical organization.

2. Types of description

Refer to a group of person or things which share the same characteristics. There are types of description:

- 1) Description of person, place or thing contains. Sensory details that bring to life actual people, place and things.
- 2) Observation describe on event the writer has witnessed. Often, the event takes place over an extended period of time.
- 3) Travel brochures. Contain factual information as well as persuasive language to encourage.

<sup>&</sup>lt;sup>6</sup>A S Hornby, Oxford Advanced Learner's Dictionary of Current English, (Oxford University Press, 1995), p. 314.

<sup>&</sup>lt;sup>7</sup>MalikatulLaila Journals, *Long Functional Text*, PLPG Sertifikasi Guru 2013, p.170.

- 4) Character sketches describe fictional characters. There areappearances, personalities, hopes and dreams.<sup>8</sup>
- 3. Social function of descriptive text

The function of descriptive text is to give information. Social function of descriptive text are to describe a particular person, place or thing. According Malikatul Laila says, the social function of description text is to inform the readers about the illustration of certain persons, places, or somethings in specific ways.<sup>9</sup>

4. The Generic Structure of Descriptive Text

Text Elements	Content	
Identification	An introduction to the objects/things described which includes who or what, when, where.	
Description	A description of an object. For example the color, the size, the smell, the taste, etc. For persons: what they look like, what they do, how they act, what they like or dislike, what makes them special. For something: how it looks, sounds, feels, smells or tastes, where it is seen or found, what it does, how it is used, what makes it	

5. Language Features

The language features of descriptive text include the following

indicators:

1) Certain nouns, such as teacher, house, my cat, bridge, etc.

<sup>&</sup>lt;sup>8</sup>*Ibid*, p.101.

<sup>&</sup>lt;sup>9</sup>*Ibid*, p.171.

<sup>&</sup>lt;sup>10</sup>MalikatulLaila Journals*Loc.Cit*,

- 2) Simple Present Tense.
- 3) Detailed noun phrases to give information about a subject, such as It was a large open rowboat, a sweet young lady, the deaf person, etc.
- 4) Various adjectives which are describing, numbering, classifying such as two strong legs, sharp white fangs, her curly hair, etc.
- 5) Relating verbs to give information about a subject, such as My mum isreally cool; It hasvery thick fur, the rest remains at home, etc.
- 6) Thinking verbs and feeling verbs to reveal the writer's view, such as The police believe the suspect is armed;I think it is a clever animal, etc.
- 7) Action verbs, such as Our new puppy bites our shoes; It eats soft food, etc.
- 8) Abverbs to give additional information about manner, such asfast, gradually, at the tree house, etc.
- 9) Figurative language, suchsimile, metafor, e.g. John is white as chalk, sat tight, etc.<sup>11</sup>

6.	Example of	descriptive text
----	------------	------------------

My Best Friend		
Identification	I have friend. She is Prillylatuconsina, and I call	
	illy.	
DescriptionHer name is Prillylatuconsina, Prilly is my classmate. She has short body. She is 150 cm straight black hair, oval face, small eyes, thick lips, thin body. She always wears pink shirt. She is friendly, helpful and she is diligent.		

<sup>&</sup>lt;sup>11</sup>MalikatulLaila JournalsLoc.Cit.

#### **C. Brainstorming Technique**

1. Defenition of Brainstorming Technique

In this research, the researcher uses brainstorming technique in students' descriptive writing ability. Brainstorming technique can help students develop their ability in writing ability. Brainstorming combines a relaxed, informal approach to problem solving with lateral thinking. According to Hornby, "Brainstorming is in order to solve a problem or to create good ideas and then technique is skill with which is able to do practical."<sup>12</sup>According to Douglas Brown, "Brainstorming technique is useful technique in writing because it permits you to approach a topic with an open mind."<sup>13</sup>

Furthermore according Al-blwi in Bilal Adel Al-khatib's journal states that Brainstorming Strategy is an innovative conference with special nature in order to produce a list of ideas that can be used as clues lead students to the development of the problem while giving each student the chance to express her ideas and share those ideas with others and encourage new ideas.<sup>14</sup>

Base on the explanation the researcher concluded the brainstorming technique based on the capacity of the human brain to make associations. Brainstorming the term commonly used to refer to any type of prewriting that authors useto help themselves generate

<sup>&</sup>lt;sup>12</sup>Oxford Learners Pocket Dictionary, (Oxford University Press, 2008), p. 47.

<sup>&</sup>lt;sup>13</sup>H. Douglas Brown, *Teaching by Principles An Interactive Approach to Language Pedagogy, Second Edition*, (San Francisco State University, 2001), p. 349.

<sup>&</sup>lt;sup>14</sup>Bilal Adel Al-Khatib journal, *The Effect of Using Brainstorming Strategy in Developing CreativeProblem Solving Skills among Female Students in Princess Alia University College*, American International Journal of Contemporary Research Vol. 2 No.10; 29<sup>th</sup> October 2012, p.30.

ideas and work out the connections between larger and smallerconcepts.

2. Brainstorming principles

The key to successful brainstorming is adherence to the following brainstorming principles. According to Arthur Vangundy, There are brainstorming principles:

- Defer judgment. Withhold all evaluation of ideas during idea generation. That is, separate generation from evaluation. Once you have listed all possible ideas, then go back and evaluate them. First, most groups don't follow it and, as a result, are less than productive. Second, deferring judgment increases the odds of finding at least one good idea. Finally, separating evaluation from generation helps you avoid creating a negative group climate.
- 2) Quantity breeds quality. The more ideas you list, the more highquality ideas you'll get. Again, it's all a matter of probability. Let's assume there is a potential pool of five hundred ideas. That's how many ideas you could generate hypothetically if you had all the brains and time in the world. Of these five hundred ideas, assume there are twenty-five you would consider as high quality.
- 3) The wilder the better. Although idea quantity is essential for idea quality, it may not always be sufficient. You can't always rely on the laws of probability. Thus, you need to free your mind and turn off censor and shake off constrains. Shoot for wild, crazy, silly, off-the-wall ideas. These ideas-and the ones they spark-are the ones you need for high-quality, winning ideas.
- 4) Combine and improve ideas. Another way to ensure high-quality ideas to not let your ideas get lonely. Give them relatives and friends. That is, use your natural powers of free association and see how you can combine an existing idea with another one to form a completely new idea. Or encourage your ideas to be all they can be. Empower them to use their full potential. Take an existing idea and try to improve it.<sup>15</sup>

<sup>&</sup>lt;sup>15</sup>Arthur Vangundy, 101 Activities for Teaching Creativity and Problem Solving, (Pfeiffer:2005), p. 247-248.

- 3. Goal and objective
  - 1) Goal to help students in writing easier.
  - Objectives to help students generate as many creative ideas as possible and to help students learn how to use the activities to generate ideas.
- 4. Procedure of teaching

There are some steps or ways in teaching by using brainstorming technique, such:

- 1) Write down your topic sentences.
- 2) Make a list of everything that comes to your mind about the subject. (Don't worry about the controlling idea for now.)
- 3) Forget about order of ideas, grammar, structure, or spelling. (use word, phrases, and /or sentences)
- 4) Just keep writing down whatever comes to your mind until you run out of ideas.
- 5) List your supporting points.
- 6) Make a simple outline.
- 7) Then you are ready to write a paragraph. $^{16}$

Based on the previous explanation, it can be concluded that brainstorming technique to help the student's writing easier. Brainstorming technique a manner in teaching process where the students are doing train activities so that higher writing skill. The aims of this technique is easier in writing. Generally, this technique of brainstorming spew out ideas about the topic. Spontaneity is

<sup>&</sup>lt;sup>16</sup>Alice Oshima and Ann Hogue, *Introduction to Academic Writing*, (Addison-Wesley Publishing Company: 1988), p. 65.
important. There is no right or wrong answer. Students may cover familiar ground first and then move off to more abstract or wild territories.<sup>17</sup>

Based on the ideas have been explained previously, it can be concluded that technique is the way of teaching and giving a problem to the students to be solved together.

# **D.** Outlining Technique

1. Defenition of Outlining Technique

In this research, the researcher use outlining technique. It helps students' descriptive writing ability. An outline simply a framework for presenting the main and supporting ideas for a particular subject or topic. According to Hornby, "Outlining is a statement of the main facts or poin and give a short general description. Technique is a method of doing or performing in the art or sciences."<sup>18</sup> According to Alice Oshima, "The outline is a helpful guide for us to use as write paragraph. In an outline our list the main points in the order in which willwrite about them."<sup>19</sup>

Furthermore According to JhonLangan, "Outlining technique is an organizational skill that will develop your ability to think in a clear and

<sup>&</sup>lt;sup>17</sup>Caroline T.Lines, *Op,Cit*, p.316 <sup>18</sup>A S Hornby, *Op,Cit*, p.822.

<sup>&</sup>lt;sup>19</sup>Alice Oshima and Ann Hogue, *Op,Cit*, p. 66.

logical manner."<sup>20</sup> Outlining technique is usually in the form of a list divided into headings and subheadings that distinguish main points from supporting points. This will help to organize write paragraph. An outline helps student's brainstorm, organize thoughts, and write faster.

- 2. Goal and Objective
  - 1) Goal to help students in writing easier.
  - 2) Objective to help students learn how to statement of the poin and give a short general description.
- 3. Procedure of Teaching

There are some steps or ways in teaching by using outlining technique, such:

- 1) Write down your topic sentence.
- 2) Make a simple outline.
- 3) Make list the main points in the order which you will write about them.
- 4) Organize thoughts.
- 5) Then you are ready to write a paragraph. $^{21}$

Based on the previous explanation, it can be concluded that outlining technique is primaly to help student in writing easier. Outlining technique a manner in teaching process where the students are doing train activities so that higherwriting skill.

<sup>&</sup>lt;sup>20</sup>JhonLangan, College Writing Skills with Reading, (McGraw-Hall:1985), p.100. <sup>21</sup>Alice Oshima and Ann Hogue, *Op*,*Cit*, p. 67.

The advanteges outlining technique emphasizes content as well as relationships between the material. Also, it reduces the time needed for editing and allows for easy reviewing. The disadvanteges this technique requires more thought for accurate, understandable organization and, therefore, cannot be used during lectures that move too quickly.

The aims of this technique is easier in writing. Generally,"this outlining technique to get started in their writing. Formal outlining, which often results from organized lists, is a highly analytical technique that assumes the writer knows already the how, what, where, when, why, and who aspects of the topic.

Based on the ideas have been explained previously, it can be concluded that technique is the way of teaching with giving a problem to the students to be solved together.

#### **E. Related Findings**

This research is a beginner, because researcher is not ever read the thesis that same with title. However, the researcher has read some thesis that relevant with this research, they are:

The First, "The Comparative Study of Students' Reading Comprehension by Using Silent Reading Technique and Loud

Reading Technique at Grade XI SMA NEGERI 8 Padangsidimpuan by Mustaina harahap."<sup>22</sup> The result of her research said that there was differences students' reading comprehension by using silent reading technique and loud reading technique. It was provided by statistical result had been obtained t count is bigger than t table (5,51>2.68). Then based on the result had been obtained mean score of the silent reading technique is higher than loud reading technique to students reading comprehension (72,77>60,62). Then "The Comparative study between SQ3R and Discussion Method to the Grade XI Madrasah Aliyah Ittahadul Mubalighin Ujung Gading Students Comprehending Narrative Text Ability in 2010-2011 Academic year" by Lindayanti. The result of her research said that the students are better in comprehension narrative text by using SQ3R method based on mean scores 70, discussion method that have the mean score is 68,75 so that, SQ3R better than discussion method.<sup>23</sup>The last,"A Comparative Study Between Information GAP and Group Investigation Methods on Students' Speaking Ability at Grade VIII

<sup>&</sup>lt;sup>22</sup>Mustaina Harahap, The Comparative Study of Students' Reading Comprehension by Using Silent Reading Technique and Loud Reading Technique at Grade XI SMA NEGERI 8 Padangsidimpuan, p.49.

<sup>&</sup>lt;sup>23</sup>Lindayanti,The Comparative Study between SQ3R and Discussion Method to the Grade XI Madrasah Aliyah Ittihadul Ujung Gading Students' Comperhending Narrative Text Ability in 2010-2011 Academic year (UMTS: Padangsidimpuan), p.63

SMP 3 Siabu'<sup>24</sup>The result had been obtained mean score of the group investigation method is higher than information gap method to students' speaking ability (70,41>69,62).

Based on related finding above, the researcher can conclude that the method, technique or strategy can increase ability students in writing ability. So, the researcher interest to make the research about "A Comparative Study Brainstorming Technique and Outlining Technique in Students' Descriptive Writing Ability at Grade XI of SMA N 7 Padangsidimpuan".

#### 6) The Conceptual Framework

Writing is one of the most important skills. Writing is the ability to write words, sentences, paragraph with to ideas and grammar well. There are many factors that the first, the ability students' writing skill low. The second, students' low achievement in writing which can be due to inappropriate writing technique, and the last their lack of practice seldom in writing.

<sup>&</sup>lt;sup>24</sup>Robiah, A Comparative Study Between Information GAP and Group Investigation Methods on Students' Speaking Ability at Grade VIII SMP 3 Siabu, p.65.

Students' descriptive writing ability is low Brainstorming and outlining technique it to solve of problem the writing Pre test Test brainstorming Test outlining Post test

The a comparative studybrainstorming technique and outlining technique can be seen as follows:

So, from the above picture, we can be seen that writing, students have lack to practice in class or our home. It makes the students' descriptive writing ability low. Then to make easier used to technique, and to know the comparativebrainstorming technique and outlining technique on their writing ability.

# 7) Hypothesis

According to Hornby, "Hypothesis is the idea that suggested as a possible explanation of facts."<sup>25</sup> From the statement above, so the hypotesis is "there is significant different of using brainstorming technique and outlining technique on students' descriptive writing ability at grad XI SMA Negeri 7 Padangsidimpuan".

<sup>&</sup>lt;sup>25</sup>A. S Hornby, *Oxford Learner's Pocket Dictionary* (New York: Oxford University Press, 1995), p.218.

### **CHAPTER III**

#### **RESEARCH METHODOLOGY**

# A. Schedule and Location of the research

This research had been done at SMA Negeri 7 Padangsidimpuan. It locatedonJendral Abdul HarisNasution by Pass Ujung Gurap, Padangsidimpuan.I choosed this place because no one investigation this problem in this place before. This subject of research was on XI grade of student of SMA Negeri 7 Padangsidimpuan in 2015 academic year. This research had been done writing proposal until finish.

### **B.** Research Design

The kind of this research was Quantitative research. It could be classifie to experimental research.L.R. Gay says, "Experiment research is the only type of research that can test hypothesis to establish cause and-effect relationship."<sup>1</sup>According to Ibnu Hajar, "Experiment research is research design scientific which more careful and appropriate to do research the effect of something variable

<sup>&</sup>lt;sup>1</sup>L.R. Gay and Peter Airasian. *Educational Research Competencies for Analysis and Application* (America: Prientce-Hall, Six Editions, 2000), p.367.

andanother variable.<sup>"2</sup> Moreover, Sumadi Suryabrata stated, experiment research is the research using a test which have special design to know the important data to answer the researcher question.<sup>3</sup>

So, the researcher could conclude that, experimental research was the research used a test which has been special design to experimental group with condition which able control.

The research design used by giving pre-test and post-test control to experiment class and control class. In this case, both of these classes gavedifferent treatment, to experiment class gave brainstorming technique and control class gaveoutlining technique. It would known the comparative of experiment both of these techniques tostudents' descriptive writing ability at Grade XI SMA Negeri 7 Padangsidimpuan.

# C. Population and Sample

1. Population

Population of this research was grade XI students at SMA Negeri 7 Padangsidimpuan academic 2014/2015. Present as follows.

<sup>&</sup>lt;sup>2</sup>Ibnu Hajar, *Dasar-dasar Metodologi Penelitian Kuantitatif Dalam Pendidikan* (Jakarta: Raja Grafindo Persada, 1999), p. 321.

<sup>&</sup>lt;sup>3</sup>Sumadi Suryabrata, *Metode Penelitian* (Jakarta: Grafindo Persada, 2005), p. 91.

No	Classroom	Amount
1	XI IA.1	20
2	XI IA.2	20
3	XI IS.1	23
4	XI IS.2	23
5	XI IS.3	24
Total		109
number		

Table I
The population of the grade XI SMA N 7 Padangsidimpuan
2014/2015

2. Sample

Sample was the part of population that were taken to investigate. The research assumes could draw population or part of number or characteristic by population.

In this research, the writer decited to choose two classes as sample.In the selecting sample, the writer used clustersampling because both of these classes have similarity characteristic. According to "Margono, cluster sampling is using when the population is big enough and only a part of population which researcher. To use the cluster sampling must do right and follow the ways which can to responsibility."<sup>4</sup> So, it could be conclude that sample which taken believe and representative characteristic of population.

<sup>&</sup>lt;sup>4</sup>S. Margono, Op. Cit., p.125.

Table II Sample of the research

Experimental Group	Control Group
XI IA.1 = 20	XI.2 = 20

1)Normality test

To know whether data of research was normal. So, researcher used chi-

Quadrate formula, as follow:

$$x^2 = \sum \left( \frac{f_o - f_h}{f_h} \right)$$

Where:

x<sup>2</sup>=Chi-Quadrate

f<sub>o</sub>=Frequency was gotten from the sample/result of observation (questioner)

 $f_h$ =Frequency wasgotten from the sample as image from frequency is hope from the population.<sup>5</sup>

To calculate the result of Chi- Quadrate used significant level 5% (0,05) and degree of freedom as big as total of frequency was lessened 3 (dk= k-3). If  $resultx_{count}^2 < x_{table}^2$ . So, it could be concluded that data was distributed by normal.

<sup>&</sup>lt;sup>5</sup>Mardalis, *MetodePenelitian: SuatuPendekatan Proposal* (Jakarta: BumiAksara, 2003), p. 85.

2)Homogeneity variant test

Homogeneity variant test was used to know whether control class and experiment class have the same variant or not. If the of class is same, it is can be called homogeneous. To test it, researcher used formula as follow:

$$F = \frac{The biggest variant}{The smallest variant}$$

Where:

 $n_1$  = Total of the data that bigger variant

 $n_2$ = Total of the data that smaller variant<sup>6</sup>

Hypothesis is reject if  $F \le F_{\frac{1}{2}a(n_1-1)(1=n_2-1)}$  While if  $F_{count} > F_{table}$  hypothesis is accepted. It determine with significant level 5% (0,05) and dk numerator is  $(n_1 - 1)$  while dk denominator is  $(n_2 - 1)$ .

# **D.** Instrument of Collecting Data

A research must have an instrument in this research because a good instrument can go guarantee for taking the valid data. In addition, Suharsimi Arikunto said, "Instrument of the research is a tool of facility is used by the researcher in collecting data.<sup>7</sup> So, that the process is easier and better with the more careful, complete and systematic. In this research, the

<sup>&</sup>lt;sup>6</sup>*Ibid.* p. 250.

<sup>&</sup>lt;sup>7</sup>SuharsimiArikunto, Op. Cit, p. 106

writer gave the pre test and post test to experiment and control class. It can see from the table below:

Class	Pre-test	Treatment	Post-test
Control Class	$\checkmark$	Outliningtechnique	
Experiment	$\checkmark$	Brainstormingtechnique	

Table IIITable of Design of Instrument

Further, in this research to collecting the data by using test. Test is the questionnaire or treatment that is used to measure knowledge, intelligence, and ability or skills of someone or groups. The form of the test is chooses the topic (essay). This test had been given to experiment class and control class which have some item. It was done to know differentiation or comparing between to method to students achievement in writing. So that, there are four value criteria to writing ability. They are: Grammar, vocabulary, mechanics, fluency and form (organization).

#### Grammar

Score 20 = Few (if any) noticeable errors of grammar or word order.

Score 15 = Some errors of grammar or word order which do not however, interfere with comprehension.

Score 10 = Errors of grammar or word order frequent; efforts of interpretation sometimes required on reader's part.

Score 5 = Errors of grammar or word order so severe as to make comprehension virtually impossible.

#### Vocabulary

Score 20 = Use of vocabulary correctly

Score 15 = Use wrong or inappropriate words fairly frequently; expression of ideas may be limited because of inadequate vocabulary.

Score 10 = Limited vocabulary and frequent errors clearly hinder expression of ideas.

Score 5 = Vocabulary limitations so extreme as to make comprehension virtually impossible.

# Mechanics

Score 20 = Few (if any) noticeable lapses in punctuation or spelling.

Score 15 = Errors in punctuation or spelling fairly frequent; occasionally rereading necessary for full comprehension.

Score 10 = Frequent errors in spelling or punctuation; lead sometimes to obscurity.

Score 5 = Errors in spelling or punctuation so severe as to make comprehension virtually impossible.

# Form (Organization)

Score 20 = Highly organized; clear progression of ideas well linked; like educated native writer.

Score 15 = Some lack of organization; re-reading required for clarification of ideas.

Score 10 = Individual ideas may be clear, but very difficult to deduce connection between them.

Score 5 = Lack of organization so severe that communication is seriously impaired.<sup>8</sup>

# Table IV

The Indicator of Writing Descriptive Text
---

No	Indikator	Number of Items	Score
1	<ul><li>Writing Achievement in Descriptive Text1. Identification</li><li>2. Description</li></ul>	1	30 70
	Total	1	100

<sup>&</sup>lt;sup>8</sup>Arthur Hughes, *Testing for Language Teachers* (New York: Cambridde University Press, 1990), p. 91-93

For this item, the score is given in writing descriptive text, for identification 30 and description are 70.

#### **D.** Procedure of Research

In this research the collecting data was through testing. The researcher collected giving pre-test, and post test to get the data about students' ability. The test applied to the experiment class and the control class. The test gave same test to both of classes. The form of test is essay. Then, the result of this testused as the data of research. The process data collect by pre- test and post- test as ways below:

- 1) The researcher prepared the test
- For the first meeting day, the researcher did pre test for one time to experiment to class and control class
- 3) For the second meeting day, the researcher did treatment for one times to experiment class are XI IA<sup>1</sup> by using brainstorming technique and for the third meeting day, the researcher did treatment for one times for class control are XI IA<sup>2</sup> by outlining technique.
- For the last meeting day, the researcher did post test for one times one times to experiment class and control class.

So, in this case the researcher did four times enter to classs in this researching from start until final. To make clearer this researching, the researcher explained as follow:

The test is divided into two kinds:

1) Pre-test

In the process pre test, the first the researcher prepared the test. The second, the researcher would distribute the test to experiment class and control class. The third; the researcher gave time and chance to answer the question of reading text. The four, the researcher would control the ways of test for experiment class and control class collect after finish. And the last, the researchergave scoring by answer the students.

2) Post-test

After gave treatment, the researcher revised the process pre test in post test from start until final. The First, the researcher start from prepared the test. The second, the researcher distributed the test to experiment class and control class. The third, the researcher gave time and chance to experiment class and control class to answer the question. The Fourth, the researcher control the ways of test and collect after finish and the last, the researcher gave scoring the students answer.

# F. Technique of the Data Analysis

1. Normality test

To know data of researcher has normal. So, researcher uses Chi-Quadrate formula, as follow:

To know data of research is normal. So, research use

$$x^2 = \sum \left(\frac{f_0 - f_h}{f_h}\right)$$

Where:

 $x^2$  = Chi-Quadrate

 $f_0$  = Frequency get from the sample/result of observation (questioner)

 $f_h$  = Frequency get from the sample as image from frequency hope from frequency hope from population.<sup>9</sup>

The calculate result of Chi-Quadrate, it is use significant level 5 % (0,05) and degree freedom as big as total of frequency is lessened 3 (dk = k-3) if result  $x_{count}^2 < x_{table.}^2$  So, it can be conclude that the data is distributed by normal.

<sup>&</sup>lt;sup>9</sup>Mardalis, katanMetodePenelitian: SuatuPendekatanPropasal, (Jakarta: BumiAksara, 2003), p.85

2. Homogeneity variant test

Homogeneity variant test was used to know whether control class and experimental classes have the same variant or not if the both of classes are same, it is can be called homogeneous. To test it, researcher used formula as follow:

 $F = \frac{The biggest Variant}{The Smallest Vriant}$ 

Where:

 $n_1$  = total of the data that bigger variant

 $n_2 =$  total of the data that smaller variant

Hypothesis is reject if  $H_0$  is accepted if  $F \le F \frac{1}{2} (n_1-1) (n_2-1)$  while if  $F_{count} > F_{table}$ . Hypothesis is accepted. It determine with significant level 5% (0,05) and dk numerator is  $(n_1 - 1)$  while dk denominator is  $(n_2 - 1)$ .

3. Hypothesis test

Data analysis was used to test the hypothesis by using t-test, that:

 $H_a = \mu_{1 \neq \mu_2}$ 

 $H_0 = \mu_{1=\mu_2}$ 

If  $H_a = \mu_{1 \neq \mu_2}$ , it was mean the result of students' writing ability descriptive text at SMA 7 Padangsidimpuan is significant. But, if the H<sub>0</sub>: it was meaning the result of students' writing ability descriptive text used

brainstorming technique. Was not significant to test hypothesis, researcher use the formula as follow:

$$t = \frac{x_{1-x_2}}{\sqrt[s]{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Where:

$X_1$	= mean of experimental class sample
$X_2$	= mean of control class sample
$N_1$	= total of experimental class sample

 $N_2$  = total of control class sample

The formula of standard deviation was:

$$s = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_1 - 1)s_2^2}{n_1 + n_2 - 2}}$$

Where:

- S = variant
- $S_1^2$  = variant of experimental class
- $S_2^2$  = variant of control class

To test criteria of hypothesis is if H<sub>0</sub> is accepted by  $-t_{table}$ < $t_{count} < t_{table}$ . By opportunity  $\left(1 - \frac{1}{2}\alpha\right)$  and dk =  $\left(\left(n_1 + n_2 - 2\right)\right)$ and H<sub>0</sub> was rejected if there is the other results. To analyze the data, the researcher use "t" test. Anas Sudjiono said "t" test is one of statistic examine which use in comparative research which do compare between two variable, that is: is there compare significant two variable.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup>Anas Sudjiono, *Pengantar Statistik Pendidikan*, (Jakarta: Raja Grafindo Persada,1987), p. 78.

#### **CHAPTER IV**

# DESCRIPTION OF THE DATAAND DISCUSSION

#### A. Description of the Data

To evaluate the result of teaching writing by using brainstorming technique and outlining technique to students' descriptive writing ability, researcher has calculated the data by pre-test and post-test. Applying quantitative analysis, researcher used the formulation of t-test. Next, researcher described the data as follow:

### 1. Description data of Pre-Test

The pre-test scores obtained before teaching in experimental class and control class is as follow:

1) Experimental Class

The score of pre- test in experimental class before teaching is as follow:

Table VThe Score of Pre- Test in Experimental Class

Total of score	The highest	The lowest	Mean	Standard deviation	Median	Mode
615	55	25	42.25	5.8	9.5	25

Based on the table above shown that sum of score in experimental class was 615, mean was 42.25, mode was 25, median was 9.5, researcher got

the highest score was 55 and the lowest score was 25, and the last standard deviation was 5.8. Next, the calculation of how to get it can be seen in the appendix 7.

From distributing of the variable data of the test result of students' achievement in writing recount text can be seen to the table and histogram of experimental class in pre-test as follow:

			-
No.	Interval	F	%
1.	25-29	10	50%
2.	30-34	4	20%
3.	35-39	4	20%
4.	40-44	0	-
5.	45-49	0	-
6.	50-54	1	5%
7.	55-59	1	5%

20

100%

Total

Table VIThe Frequency Distribution of Students' Score in Experimental Class

From the table above, the students score that is there in class interval between 25-29 was 10 students (25%), class interval 30-34 was 4 students (20%), class interval 35-39 was 4 students (20%), class interval 40-44 was 0 students (0%), class interval 45-49 was 0 students (0%), class interval 50-54 was 1 students (5%), the last class interval 55-59 was 1 students (5%).

By visual, distributing of the data can be described to histogram form, as follow:



Figure 1: The histogram of students' score of experimental class

Based on result of the test students' achievement in writing descriptive text, researcher found that mean score of students in the experimental class before usingbrainstorming technique is 42.25.Highest score is 55 and smallest score is 25.

# 2) Control Class

The score of pre- test in control class before teaching is as follow:

Table VIIThe Score of Pre- Test in Control Class

Total of score	The highest	The lowest	Mean	Standard deviation	Median	Mode
610	50	25	48.25	11.05	14.5	25

Based on the table sum of score in control class was 610, mean was 48.25, mode was 25, median was 14.5, researcher got the highest score was 50 and the lowest score was 25, and the last standard deviation was 11.05. Next, the calculation of how to get it can be seen in the appendix 8.

Table VIII
The Frequency Distribution of Students' Score in Control Class

No.	Interval	F	%
1.	25-29	13	65%
2.	30-34	1	5%
3.	35-39	2	10%
4.	40-44	1	5%
5.	45-49	1	5%
6.	50-51	2	10%
Total		20	100%



Based on the table, it can be drawn at histogram as below:

Figure 2: The histogram of students' score of control class

From the above table, the researcher concluded the students' achievement before using outlining technique was low. It was improved by the means score of experimental class and 42.25 control class was 48.25.

# 2. Description Data of Post Test

The post test scores obtained in experimental class and control class are:

a. Experimental class

The score of post test in experimental class after teaching is as follow:

Table IXThe Score of Post- Test in Experimental Class

Total of score	The highest	The lowest	Mean	Standard deviation	Median	Mode
1230	85	50	54.9	13.86	70.25	50

Based on the table sum of score in experimental class was1230, mean was 54.9 mode was 50, median was 69, researcher got the highest score was 85 and the lowest score was 50, and the last standard deviation was 13.86. Next, the calculation of how to get it can be seen in the appendix 9. Then, the computed of the frequency distribution of the students' score in post test of group can be applied in to table frequency distribution as follows:

Table XThe Frequency Distribution of Students' Score in Experimental Class

No.	Interval	F	%
1.	50 - 55	5	25%
2.	56 - 61	7	35%
3.	62 – 67	4	20%
4.	68 – 73	1	5%
5.	74 – 79	1	5%
6.	80 - 85	2	10%
Total		20	100%



Based on the table, it can be drawn at histogram as below:

Figure 3: The histogram of students' score of experimental class

b. Control class

The score of post- test in control class after teaching is as follow:

Table XIThe Score of Post- Test in Control Class

Total of score	The highest	The lowest	Mean	Standard deviation	Median	Mode
925	75	25	53.5	16.2	5.5	50

Based on the table sum of score in experimental class was 925, mean was 53.5 mode was 50, median was 5.5, researcher got the highest score was 75 and the lowest score was 25, and the last standard deviation was 16.2. Next, the calculation of how to get it can be seen in the appendix 10. Then, the computed of the frequency distribution of the student's score in post-test can be applied in to table frequency distribution as follows:

Table XIIThe Frequency Distribution of Students' Score in Control Class

No.	Interval	F	%
1.	25-34	5	25%
2.	35-44	2	10%
3.	45-54	10	50%
4.	55-64	-	-
5.	65-74	1	5%
6.	75-84	2	10%
Total		20	100%

Based on the table, it can be drawn at histogram as below:





Next, from calculation above the researcher concluded the students' skill after teaching by using group work strategy was increase quickly. It can be seen from the mean score of experimental class was bigger than control class (54.9>53.5).

# 3. Hypothesis Test of Pre Test

a. Normality

Testing normality of distribution of two group used the chisquared test. Normality test is used to determine the normality of the experimental class and control class. The data obtained from the average of pre test score in experimental class and control class can be seen in the following table:

Class	$X^2_{count}$	$X^2_{table}$
Experimental	-45.99	5.99
Control	360.648	5.991

From the table above it is explained that experimental class and control class distributed normal. Next, the calculation of how to get it can be seen in the appendix 7 and 8.

# b. Homogeneity

Homogeneity test is intended to determine whether the scores of the samples have the same varience (homogeneous).

Distribution	F <sub>count</sub>	F <sub>table</sub>
Homogeneity test	1.096	2.021

Based on the table above described that  $F_{count} < F_{table}$  it can be seen in the calculation that explain 1.096< 2.021. It's mean that both of classes have the same variant. Next, the calculation of how to get it can be seen in appendix 11.

c. Test of Equality Two Mean

Analysis of the data used is t- test test the hypothesis.

Distribution	t <sub>count</sub>	t <sub>table</sub>
Equality two mean	-7.015	1.68

Based on the calculation of pre test above it is concluded that the samples are distributed normal, homogeneous. It means that the two classes in this study begin from the same situation. Next, the calculation of how to get it can be seen in appendix 13.

### 4. Hypothesis Test of Post Test

# a. Requirement Test

1. Normality

Testing normality of distribution of two group used the chisquared test. Normality test is used to determine the normality of the experimental class and control class. The data obtained from the average of post test score in experimental class and control class can be seen in the following table:

Class	$X^2_{count}$	$X^2_{table}$
Experimental	19.36	9.488
Control	-10.49	14.067

From the table above it is explained that experimental class and control class distributed normal. Next, the calculation of how to get it can be seen in the appendix 9 and 10.

2. Homogeneity

Homogeneity test is intended to determine whether the scores of the samples have the same varience (homogeneous).

Distribution	F <sub>count</sub>	F <sub>table</sub>
Homogeneity test	1.096	1.68

Based on the table above described that  $F_{count} < F_{table}$  it can be seen in the calculation that explain 1.42< 1.76. It's mean that both of classes have the same variant. Next, the calculation of how to get it can be seen in appendix 12.

#### b. Hypothesis

Before make the hypotheses researcher made the formulation of the problem before, the formulation of the problem was "is there difference of Descriptive Writing Ability by using Brainstorming Technique and Outlining Technique in Grade XI at Senior High School N 7 Padangsidimpuan.Next, the hypothesis of the research was "thereisdifference of Descriptive Writing Ability by using Brainstorming Technique and Outlining Technique in Grade XI at Senior High School N 7 Padangsidimpuan.Then, researcher have criteria of the test hypotheses, if  $t_0 > t_t$ null hypotheses (H<sub>0</sub>) is rejected the alternative Hypotheses (H<sub>a</sub>) is accepted.In turn if  $t_0 < t_t$ the alternative hypotheses (H<sub>a</sub>) is rejected and null hypotheses (H<sub>0</sub>) is accepted, it meansthat the hypotheses of research is rejected. Based on the data collected, the data will be analyzed to prove hypothesis by using formula of t-test.

The degree of freedom (df) is  $= n_1 + n_2 - 2$ . The totals of students in every class are 20 in class XI.IA.1 and 20 in class XI.IA.2. So, df =20+20 - 2 = 38, from the percentage points of the t distribution can be seen that the table of significant get point 26.928. After the data calculated the researcher got t<sub>0</sub> is 26.928whereast<sub>t</sub>was 1.68. It shown that  $t_0$  is bigger than  $t_t(26.928> 1.68)$ .So, the hypotheses null (H<sub>0</sub>) is rejected and the alternative hypotheses (H<sub>a</sub>) is accepted and the score mean (x<sub>1</sub>), it can be seen as follow:

$$\bar{x} = \frac{\sum FiXiFi}{n} = \frac{54,9}{20} = 2,745$$

The score of mean  $(x_2)$ , it can be seen as follow:

$$\bar{x} = \frac{\sum FiXiFi}{n} = \frac{53,5}{20} = 2,675$$

In conclusion, from the calculation above, that there was the difference between brainstorming technique and outlining technique. Although actually, the result was not significant 2.745 from brainstorming technique and 2.675 from outlining technique.

It means that the hypothesis of research is accepted and there is gooddescriptive writing ability by using brainstorming technique better than outlining technique in grade XI at senior high school N 7 Padangsidimpuan.It is said because there are different between score of students' writing descriptive text in experimental class and control class. The score in experimental class was bigger than control class.

The students' writing descriptive text in experimental class is better than control class. It can be seen from mean score in experimental class was 54.9and mean score in control class was 53.5. From the calculation above the researcher concluded the students' writing ability after teaching by using brainstorming technique was increase quickly.

#### **B.** Discussion

Based on the theory and related findings, the researcher discuss what that was found. The first,The Effect of Guided Writing on Students' Writing Descriptive Paragraph Ability at Grade VII SMP N 5 Padangsidimpuan by HanifahParadiptaSiregarF<sub>count</sub> <  $F_{table}(1.009<1.706)$  in pretest. Then, The Effect of Group Investigation Method on Students' Writing Descriptive Paragraph Ability at Grade VIII SMP N 2 Kotanopan by RahmiJulianiNasutionF<sub>count</sub> <  $F_{table}(1.41<2.12)$  in pre test. Next, The Comparative study between SQ3R and Discussion Method to the Grade XI Madrasah AliyahIttahadulMubalighin Ujung Gading Students Comprehending Narrative Text AbilitybyLindayantiF<sub>count</sub> <  $F_{table}(0.0446<0.161)$ in pre test.The last, A Comparative Study Between Brainstorming and Outlining Technique in Students' Descriptive Writing Ability at Grade XI of SMA N 7 Padangsidimpuan by ShabrinaF<sub>count</sub> <  $F_{table}(-$ 45.99<5.99) in pre test.

The second, The Effect of Guided Writing on Students' Writing Descriptive Paragraph Ability at Grade VII SMP N 5 Padangsidimpuan by HanifahParadiptaSiregar $\bar{x}_1 = 75, 15\bar{x}_2 = 74.34$  in post test. Then, The Effect of Group Investigation Method on Students' Writing Descriptive Paragraph Ability at Grade VIII SMP N 2 Kotanopan by RahmiJulianiNasution $\bar{x}_1 = 78.1\bar{x}_2 = 72.32$ in post test. Next, The Comparative study between SQ3R and Discussion Method to the Grade XI Madrasah AliyahIttahadulMubalighin Ujung GadingStudentsComprehending Narrative Text AbilitybyLindayanti $\bar{x}_1 = 70\bar{x}_2 =$ 68.75 in posttest.The last, A Comparative Study Between Brainstorming and Outlining Technique in Students' Descriptive Writing Ability at Grade XI of SMA N 7 Padangsidimpuan by Shabrina $\bar{x}_1 = 2.745\bar{x}_2 = 2.675$  in post test.

Base on the explanation above the result of theirs research. Rahmi's research was higher than the other research. There werethe result in post test had been obtainedHanifah $\bar{x}$ = 75.15, Rahmi $\bar{x}$  = 78, Lindayanti  $\bar{x}$  = 70, Shabrina  $\bar{x}$  = 2.745. Then  $\mu$  of their research were Hanifah (1.78> 1.67), Rahmi (2.12 > 1.68), Lindayanti(3.5 > 1.68) and Shabrina (26.928 > 1.68).

Therefore, the researcher found the students' writing descriptive text before using brainstorming technique is lower than the students' writing descriptive text after using brainstorming technique. It can be seen from last of mean score in experimental class was 2.745 and control class 2.675. It means the result and hyphotesis testing show that brainstorming technique had the method, and hyphothesis alternative (H<sub>a</sub>) was accepted and hyphothesis zero (H<sub>0</sub>) was rejected. It was indicated that the score of experimental class was bigger than control class (2.745 > 2.675), and also indicatedt<sub>o</sub>>t<sub>t</sub>(26.928 > 1.68).

Then, base on the result had been obtained mean score of brainstorming technique is higher than outlining technique to students descriptive writing ability (2.745>2.675). So, the implication of the research brainstorming
technique is better than outlining technique in students' descriptive writing ability.

# C. Threats of the Research

The researcher found the threat of this research as follow:

- 1. The students needed more time for answering the test.
- 2. The students were noisy when answering the test.
- 3. The limited of the instrument of research.
- 4. The limited of English books (especially reading book) in the writer's campus.
- 5. The researcher was lack of experience in processing data or lack of knowledge about it.

#### **CHAPTER V**

## **CONLUSION AND SUGGESTION**

## A. Conclusion

Based on the result of the research and calculation of the data, the researcher got the conclusion that there was the difference between students' writing ability by using brainstorming technique and outlining technique at grade XI of SMANegeri7Padangsidimpuan. The hypothesis alternative ( $H_a$ ) was accepted. Mean score of experimental class in post test was 54.9, it was bigger than control class (54.9 >53.5) and proven with t<sub>count</sub>was higher than t<sub>table</sub>(26.928>1.68). Then based on the result had been obtained mean score of brainstorming technique is higher than outlining technique in students' descriptive writing ability (2.745>2.675). So, the researcher concluded thatbrainstorming technique is better than outlining technique on students' writing ability in descriptive text.

# **B.** Suggestion

After the researcher finished this research, the researcher got many informations in English teaching and learning process. Therefore researcher has suggestions below:

 Generally, brainstorming technique can use as an alternative way of teaching in teaching writing.

- 2. For teacher, as an English teacher were hoped to use appropriate tchnique to explain or to teach English subject to the students. Then, from the result of the research, brainstorming technique better than outlining technique. So that, the writer suggests brainstorming technique can be applied on the English teaching classroom especially for teachers who want to increase students' ability in writing.
- 3. For the students, it is hoped that by using brainstorming technique the students more interested and active in studying English, because brainstorming technique can reflect their critical thinking to discuss the problem. And improve students' self-confident to express their idea.
- 4. For the researcher, brainstorming technique as reference to further or other experimental research more paying attention in the efficiency of time.

# REFERENCES

- Anas Sudjiono, Pengantar Statistik Pendidikan, Jakarta: Raja Grafindo Persada, 1987.
- Amstrong Joyce, Carroll and Friends, Writing and Grammar Communications in Action Platinum Level, Prentice-Hall: New Jersey, 2001.
- A.S. Hornby, Oxford Advanced learners Dictionary, New York: Oxford University Press, 1995.

\_\_\_\_\_, Oxford Advanced learners Dictionary, New York: Oxford University Press, 2000.

\_\_\_\_\_, Oxford Advanced Learner's Dictionary. New York: Oxford University Press, 2008.

Brown, H. Douglas, Teaching by Principles. New Jersley: Englewood, 1994.

\_,*Teaching by Principles An Interactive Approach to Language* 

Pedagogy, Second Edition. SanFrancisco State University, 2001.

\_\_\_\_\_, Language Assessment Principles and Classroom Practice.San Francisco: Longman, 2004.

- JayantiDaksina Murthy, Contemporary English Grammar. New Delhi: Book Place, 2003.
- Gay, L.R. and Peter Airasian, *Educational Research: Competencies for Analysis and Applicatio.* New Jersey: Prentice Hall, 2000.
- Glenco, *Literature Reading with Purpose*, New York: McGrow-Hill Companies, 2005.
- HughesArthur, *Testing For Language Teacher*, New York: Cambridge University Press, 1990.

HogueAnn and Oshima Alice, Introduction to Academic Writing, Addision Wesley

Publishing Company, 1988.

IbnuHajar, Dasar-Dasar Metodologi Penelitian Kuantitatif dalam Pendidikan.

Jakarta: Raja Grafindo Persada, 1999.

- Jack C. Ricahard and Willy A. Renandya, *Metodology in Language Teaching an Anthology of Current Praktice*. USA: Combridge University Press, 2000.
- Jhonson Keith, An Introduction to Foreign Language Learning and Teaching, England: Person Education Limited, 2001.
- Langan Jhon, College Writing Skills with Reading, McGraw-Hall, 1985.
- Linse T. Caroline, *Practical English Language Teaching:Young Learners*,McGrow-Hill Companies,2005.
- Malikatul Laila Journals, *Long Functional Text*, New York: PLPG Sertifikasi Guru,2013.
- Mardalis, Metode Penelitian: Suatu Pendekatan Proposal, Jakarta: Bumi Aksara, 2003.
- Marcella Frank, Modern English, New York: Prentice Hall, 1972.
- Nunan David, *Practical English Language Teaching*, America: The McGrow Hill Companies, 2003.
- O Malley J. Micheal, *Authentic Assessment for English Language Learners*, USA: Addison Wesley Publishing, 1996.
- Oxford of University, Oxford Advanced Learners' Dictionary or Current English, New York: Oxford University Press, 2005.
- Sumadi Suryabrata, Metodologi Penelitian, Jakarta: Grafindo Persada, 2005.
- Vangundy Arthur, 101 Activities for Teaching Creativity and Problem Solving, Pfeiffer, 2005.

# CURRICULUM VITAE

# A. Identity

Name	: SHABRINA RASYID MUNTHE
Nim	: 11 340 0079
Place and Birthday	: Rantauprapat, 20 <sup>th</sup> April 1993
Sex	: Female
Religion	: Moslem
Address	: Dusun II Kp. Baru Pangkatan KAB. Labuhan Batu

# **B.** Parent

1.	Father's name	: Abdul Rahmad Munthe
2.	Mother's name	: Siti Maryam MS S.Pd.I

# C. Educational Background

1. Elementary School	: SD N 112199 Kampung Padang	(2004)
2. Junior High School	: MTs. N Rantauprapat	(2007)
3. Senior High School	: SMA S Kemala Bhayangkari-2 Rantauprapat	(2010)
4. Institute	: IAIN Padangsidimpuan	(2015)

# Appendix I

## PLANNING OF THE TEACHING

# CLASS EXPERIMENT 1

School : SMA Negeri 7 Padangsidimpuan

Subject matter : English

Class/semester : XI

Standard Competence : mengungkapkan makna dalam teks tulis fungsional pendek dan esai sederhana berbentuk descriptive dalam konteks kehidupan sehari-hari.

Basic Competence : mengungkapkan makna teks descriptive secara lisan dan tulisan dengan sederhana tentang orang, tempat wisata, bangunan sejarah, dengan memperhatikan tujuan, stuktur twks dan unsur kebahasaan secara benar dan sesuai dengan konteks.

Kind of text : Descriptive text

Aspect/skill : Writing

Time : 2 X 45 menit

1. Indicators :

a. Siswa mampu menggunakan kalimat present tense dalam bentuk descriptive teks.

b. Siswa mampu menghasilkan teks descriptive dengan struktur teks yang benar secara unsure kebahasaan secara benar dan sesuai dalam konteks.

#### Appendix II

#### PLANNING OF THE TEACHING

# CLASS EXPERIMENT 2

School : SMA Negeri 7 Padangsidimpuan

Subject matter : English

Class/semester : XI

Standard Competence : mengungkapkan makna dalam teks tulis fungsional pendek dan esai sederhana berbentuk descriptive dalam konteks kehidupan sehari-hari.

Basic Competence : mengungkapkan makna teks descriptive secara lisan dan tulisan dengan sederhana tentang orang, tempat wisata, bangunan sejarah, dengan memperhatikan tujuan, stuktur twks dan unsur kebahasaan secara benar dan sesuai dengan konteks.

Kind of text : Descriptive text

Aspect/skill : Writing

Time : 2 X 45 menit

1. Indicators :

a. Siswa mampu menggunakan kalimat present tense dalam bentuk descriptive teks.

b. Siswa mampu menghasilkan teks descriptive dengan struktur teks yang benar secara unsure kebahasaan secara benar dan sesuai dalam konteks.

# Appendix III

# PRE TEST

#### 1. Pengantar

- Instrument ini hanya bertujuan untuk menjaring data siswa/i tentang student's writng ability descriptive text.
- b. Jawaban anda tidak mempengaruhi kedudukan anda disekolah ini.

## 2. Petunjuk

- a. Bacalah pertanyaan berikut ini dengan seksama.
- b. Jawablah pertanyaan dengan jawaban yang tepat.
- c. Apabila ada pertanyaan yang kurang jelas, tanyakan langsung kepada pengawas
- 3. Soal

Pilihlah salah satu judul dibawah ini. Kemudian buatlah kedalam teks deskriptif.

- a. My father
- b. My Aunty
- c. My brother

Validator,

Sojuangon Rambe, S.S, M. PD.,

NIP. 19790815 200604 1 003

# Appendix IV

# POST TEST

#### 1. Pengantar

- Instrument ini hanya bertujuan untuk menjaring data siswa/i tentang student's writng ability descriptive text.
- b. Jawaban anda tidak mempengaruhi kedudukan anda disekolah ini.

#### 2. Petunjuk

- a. Bacalah pertanyaan berikut ini dengan seksama.
- b. Jawablah pertanyaan dengan jawaban yang tepat.
- c. Apabila ada pertanyaan yang kurang jelas, tanyakan langsung kepada pengawas
- 3. Soal

Pilihlah salah satu judul dibawah ini. Kemudian buatlah kedalam teks deskriptif.

- a. My Mother
- b. My Uncle
- c. My Sister

Validator,

Sojuangon Rambe, S.S, M. PD.,

NIP. 19790815 200604 1 003

# Appendix I

## PLANNING OF THE TEACHING

# CLASS EXPERIMENT 1

School : SMA Negeri 7 Padangsidimpuan

Subject matter : English

Class/semester : XI

Standard Competence : mengungkapkan makna dalam teks tulis fungsional pendek dan esai sederhana berbentuk descriptive dalam konteks kehidupan sehari-hari.

Basic Competence : mengungkapkan makna teks descriptive secara lisan dan tulisan dengan sederhana tentang orang, tempat wisata, bangunan sejarah, dengan memperhatikan tujuan, stuktur twks dan unsur kebahasaan secara benar dan sesuai dengan konteks.

Kind of text : Descriptive text

Aspect/skill : Writing

Time : 2 X 45 menit

1. Indicators :

a. Siswa mampu menggunakan kalimat present tense dalam bentuk descriptive teks.

b. Siswa mampu menghasilkan teks descriptive dengan struktur teks yang benar secara unsure kebahasaan secara benar dan sesuai dalam konteks.

#### Appendix II

#### PLANNING OF THE TEACHING

# CLASS EXPERIMENT 2

School : SMA Negeri 7 Padangsidimpuan

Subject matter : English

Class/semester : XI

Standard Competence : mengungkapkan makna dalam teks tulis fungsional pendek dan esai sederhana berbentuk descriptive dalam konteks kehidupan sehari-hari.

Basic Competence : mengungkapkan makna teks descriptive secara lisan dan tulisan dengan sederhana tentang orang, tempat wisata, bangunan sejarah, dengan memperhatikan tujuan, stuktur twks dan unsur kebahasaan secara benar dan sesuai dengan konteks.

Kind of text : Descriptive text

Aspect/skill : Writing

Time : 2 X 45 menit

1. Indicators :

a. Siswa mampu menggunakan kalimat present tense dalam bentuk descriptive teks.

b. Siswa mampu menghasilkan teks descriptive dengan struktur teks yang benar secara unsure kebahasaan secara benar dan sesuai dalam konteks.

# Appendix III

# PRE TEST

#### 1. Pengantar

- Instrument ini hanya bertujuan untuk menjaring data siswa/i tentang student's writng ability descriptive text.
- b. Jawaban anda tidak mempengaruhi kedudukan anda disekolah ini.

## 2. Petunjuk

- a. Bacalah pertanyaan berikut ini dengan seksama.
- b. Jawablah pertanyaan dengan jawaban yang tepat.
- c. Apabila ada pertanyaan yang kurang jelas, tanyakan langsung kepada pengawas
- 3. Soal

Pilihlah salah satu judul dibawah ini. Kemudian buatlah kedalam teks deskriptif.

- a. My father
- b. My Aunty
- c. My brother

Validator,

Sojuangon Rambe, S.S, M. PD.,

NIP. 19790815 200604 1 003

# Appendix IV

# POST TEST

#### 1. Pengantar

- Instrument ini hanya bertujuan untuk menjaring data siswa/i tentang student's writng ability descriptive text.
- b. Jawaban anda tidak mempengaruhi kedudukan anda disekolah ini.

#### 2. Petunjuk

- a. Bacalah pertanyaan berikut ini dengan seksama.
- b. Jawablah pertanyaan dengan jawaban yang tepat.
- c. Apabila ada pertanyaan yang kurang jelas, tanyakan langsung kepada pengawas
- 3. Soal

Pilihlah salah satu judul dibawah ini. Kemudian buatlah kedalam teks deskriptif.

- a. My Mother
- b. My Uncle
- c. My Sister

Validator,

Sojuangon Rambe, S.S, M. PD.,

NIP. 19790815 200604 1 003

# Result of the Normality Test of Experimental Class by Using Brainstorming Tehnique in Pre-Test

- 1. The score of experiment class in pre test from low score to high score:
  - 2525252525252525252530303030353535355055
- 2. High = 55 Low = 25 = High - Low Range = 55 - 25= 30  $= 1 + 3,3 \log(n)$ 3. Total of Classes  $= 1 + 3,3 \log(20)$ = 1 + 3,3 (1,30)= 1 + 4,29= 5,29= 5 4. Length of Classes  $=\frac{range}{total of class}$   $=\frac{30}{6}=5$
- 5. Mean

Interval Class	f	Х	x	fx	x <sup>'2</sup>	fx' <sup>2</sup>
25 – 29	10	27	2	20	4	40
30 - 34	4	32	1	4	1	4
35 - 39	4	37	0	0	0	0
40 - 44	0	-	-	-	-	-
45 - 49	0	-	-	-	-	-
50 - 54	1	52	-1	-1	1	1
55 – 59	1	57	-2	-2	4	4

<i>i</i> = 5	20		-21	49

$$Mx = M^{1} + i \frac{\Sigma f x^{1}}{N}$$
  
= 37 + 5 ( $\frac{21}{20}$ )  
= 37 + 5 (1,05)  
= 37 + 5,25  
= 42,25  
$$SD_{t} = i \sqrt{\frac{\Sigma f x^{2}}{N}} - \left[\frac{\Sigma f x'}{N}\right]^{2}$$
  
=  $5 \sqrt{\frac{49}{20}} - \left[\frac{21}{20}\right]^{2}$   
=  $5 \sqrt{2,45} - (1,05)^{2}$   
=  $5 \sqrt{2,45} - (1,05)^{2}$   
=  $5 \sqrt{1,35}$   
= 5 (1,16)  
= 5,8

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(\underline{f_0}\underline{-}\underline{f_h})}{f_h}$
55.50	59,5	2,97	0,4948	0.0170	0.210	1	0.14
55-59	54.5	2.11	0.4826	0,0159	0,318	1	2,14
50-54	0 1,0	2,11	0,1020	0,0882	1,764	1	-0,43
45 40	49,5	1,25	0,3944	0.2464	4 0 2 9	0	1
45-49	44.5	0.38	0.1480	0,2404	4,928	0	-1
40-44	y -	- ,	- ,	-0,0328	-0,656	0	-1
35 30	39,5	-0,47	0,1808	0 2274	1 5 1 8	4	1 97
55-59	34,5	-1,33	0,4082	-0,2274	-4,540	4	-1,07
30-34				-0,0505	-1,01	4	-4,96
25-29	29,5	-2,19	0,4857	-0.0132	-0.264	10	-38 87
25 27	24,5	-3,06	0,4989	0,0152	0,204	10	50,07
							45.00
							-45.99

Table of the Frequency Distribution is Expected and Observation

Based on table above, reseracher found that  $x_{count}^2 = -45,99$  while  $x_{table}^2 = 5,99$ , cause  $x_{count}^2 < x_{table}^2$  (-45,99< 5,99) with degree of freedom dk = 5 - 3 = 2 and significant level  $\alpha = 5\%$ . So distribution of experimental class by using group work strategy (Pre-test) is normal.

# 6. Median

No	Interval of Classes	F	fk
1	25-29	10	10
2	30-34	4	14
3	35-39	4	18
4	40-44	0	18
5	45-49	0	18
6	50-54	1	19
7	55-59	1	20

Explanation :

Me = Bb + i 
$$\left(\frac{n/2 - F}{fm}\right)$$

Me = Median

Bb = Low limit of the interval median conceives Me

- Fm = Frequency of class conceives Me
- F = Frequency of cumulative before interval of classes conceives Me
- i = Length of classes
- n = Total of sample

Position of Me in the interval of classes is number 2, that:

So:

Me = Bb + i 
$$\left(\frac{n/2 - F}{fm}\right)$$
  
= 49,5 + 5  $\left(\frac{10 - 18}{1}\right)$   
= 49,5 + 5 (-8)  
= 49,5 + (-40)  
= 9,5

7. Modus = 25

# Result of the Normality Test of Experimental Class by Using Brainstorming Technique in Post-Test

1. The score of experiment class in pre test from low score to high score: 50 50 50 50 50

	50 50	50	50	50			
	55 55	55	60	60			
	60 60	65	65	65			
	65 70	75	85	85			
2.	High		= 85				
	Low		= 50				
	Range		= Hig	gh –	- Low		
				=	= 85 - 50		
				=	= 35		
3.	Total o	f Cla	sses	=	$= 1 + 3,3 \log(n)$		
				=	= 1 + 3,3 log (20)		
				=	= 1 + 3,3 (1,30)		
				=	= 1 + 4,29		
				=	= 5,29		
				=	= 5		
Δ	Length	of $C$	lasse	с —	range	_ 35	7
7.	Lengui	or C	14350	. –	total of class	5 5	,

5. Mean

Interval Class	f	Х	x	fx	x <sup>2</sup>	fx <sup>'2</sup>
50 - 55	5	53.5	1	5	1	5
56 - 61	7	58,5	0	0	0	0
62 – 67	4	64,5	-1	-4	1	4
68 – 73	1	70,5	-2	-2	4	4
74 – 79	1	76,5	-3	-3	9	9
80 - 85	2	82,5	-4	-8	32	64
<i>i</i> = 7	20			-12		86

$$Mx = M^{1} + i \frac{\Sigma f x^{1}}{N}$$
  
= 58,5+ 6( $\frac{-12}{20}$ )  
= 58,5+ 6(-0,6)  
= 58,5+ (-3,6)  
= 54,9

$$SD_{t} = i \sqrt{\frac{\Sigma f x'^{2}}{N}} - \left[\frac{\Sigma f x'}{N}\right]^{2}$$
  
=  $7 \sqrt{\frac{86}{20} - \left[\frac{-12}{20}\right]^{2}}$   
=  $7 \sqrt{4,3 - (0,6)^{2}}$   
=  $7 \sqrt{4,3 - 0,36}$   
=  $7 \sqrt{3,94}$   
=  $7 (1,98)$   
=  $13,86$ 

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(\underline{f_0}\underline{-}\underline{f_h})}{f_h}$
	85,5	2,20	0,4861		0.10		• • • •
80-85	79 5	1 77	0.4616	0,0245	0,49	2	3,08
74-79	17,5	1,77	0,4010	0,0517	1,034	1	-0,03
	73,5	1,34	0,4099	0.0010			0.45
68-73	67.5	0.91	0 3186	0.0913	1,826	1	-0,45
62-67	07,5	0,71	0,5100	0,0996	1,992	4	1,01
<b>-</b> 1	61,5	0,58	0,2190	0.0000	0 7 4	_	0.1.6
56-61	55 5	0.47	0 1808	0,0382	0,764	7	8,16
50-55	55,5	0,47	0,1000	0,0291	0,582	5	7,59
	49,5	-0,39	0,1517				
							10.26
							19,36

Table of the Frequency Distribution is Expected and Observation

Based on table above, reseracher found that  $x_{count}^2 = 19,36$  while  $x_{table}^2 = 9,488$  cause  $x_{cause}^2 > x_{table}^2$  (19,36 > 9,488) with degree of freedom dk = 7 - 3 = 4 and significant level  $\alpha = 5\%$ . So distribution of experimental class by using group work strategy (Post-test) is normal.

# 6. Median

No	Interval of Classes	F	fk
1	50-55	5	5
2	56-61	7	12
3	62-67	4	16
4	68-73	1	17
5	74-79	1	18
6	80-86	2	20

Position of Me in the interval of classes is number 2, that:

So:

Me = Bb + i 
$$\left(\frac{\frac{n}{2} - F}{fm}\right)$$
  
= 61,5 + 7  $\left(\frac{10 - 5}{4}\right)$   
= 61,5 + 7 (5/4)  
= 61,5 + 7 (1,25)  
= 61,5 + 8,75  
= 70.25

7. Modus = 50

# APPENDIX X

# Result of the Normality Test of Control Class by using Conventional Strategy in Post-Test

- 1. The score of experiment class in pre test from low score to high score:
  - 252525303040405050505050505050505050657075
- 2. High = 75 = 25 Low = High - Low Range = 75 - 25= 50 3. Total of Classes  $= 1 + 3,3 \log(n)$  $= 1 + 3,3 \log(20)$ = 1 + 3,3 (1,30)= 1 + 4,29= 5,29 = 5 4. Length of Classes  $=\frac{range}{total of class}$   $=\frac{50}{5}=10$ 
  - 5. Mean

Interval Class	F	Х	x	fx	x <sup>'2</sup>	fx <sup>2</sup>
25 - 34	5	30	2	10	4	20
35 - 44	2	40	1	2	1	2
45 - 54	10	50	0	0	0	0
55 - 64	0	-	-	-		-
65 – 74	1	70	-1	-1	1	1
75 - 84	2	80	-2	-4	16	32
<i>i</i> = 10	20			9		55

$$Mx = M^{1} + i \frac{\Sigma f x^{1}}{N}$$
  
= 50 + 10( $\frac{7}{20}$ )  
= 50 + 10(0,35)  
= 50 + (3,5)  
= 53,5

$$SD_{t} = i \sqrt{\frac{\Sigma f x'^{2}}{N}} - \left[\frac{\Sigma f x'}{N}\right]^{2}$$
$$= 10 \sqrt{\frac{55}{20}} - \left[\frac{7}{20}\right]^{2}$$
$$= 10 \sqrt{2,75} - (0,1225)^{2}$$
$$= 10 \sqrt{2,6275}$$
$$= 10 (1,62)$$
$$= 16,2$$

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(\underline{f_0}\underline{-}\underline{f_h})}{f_h}$
	84,5	1,91	0,4719				
75-84	745	1 20	0.4015	0,0704	1,408	2	0,42
65-74	74,5	1,29	0,4015	0 1529	3 058	1	-0.67
03-74	64.5	0,67	0,2486	0,1527	5,050	1	-0,07
55-64		- ,	- 7	0,2247	4,494	0	-1
	54,5	0,06	0,0239				
45-54	52 F	0.55	0.2000	-0,1849	-3,698	10	-3.70
35-44	55,5	-0,55	0,2088	-0 1702	-3 404	2	-1 58
55 ++	44,5	-1,17	0,3790	0,1702	5,404	2	1,50
25-34	, ,	,	,	-0,0843	-1,686	5	-3,96
	24,5	-1,79	0,4633				
			1				-10,49

Table of the Frequency Distribution is Expected and Observation

Based on table above, reseracher found that  $x_{count}^2 = -10,49$  while  $x_{table}^2 = 14,067$ , cause  $x_{count}^2 > x_{table}^2$  (-10,49 < 14,067) with degree of freedom dk = 10 - 3 = 7 and significant level  $\alpha = 5\%$ . So distribution of control class by using discourse method (Post-test) is normal.

# 6. Median

No	Interval of Classes	F	fk
1	25-34	5	5
2	35-44	2	7
3	45-54	10	17
4	55-64	0	17
5	65-74	1	18
6	75-84	2	20

Position of Me in the interval of classes is number 2, that:

So:

Me = Bb + i 
$$\left(\frac{n/2 - F}{fm}\right)$$
  
= 64,5 + 10  $\left(\frac{10 - 17}{1}\right)$   
= 64,5 + 10 (-7)  
= 64,5 + (-70)  
= -5,5

7. Modus = 50

# **HOMOGENEITY TEST (PRE-TEST)**

Calculation of parameter to get variant of the first class as experimental class sample by using group work strategy and variant of the second class as control class sample by using conventional strategy are used homogeneity test by using formula:

$$S^{2} = \frac{n\Sigma xi^{2} - (\Sigma xi)}{n(n-1)}$$

Hypothesis:

$$H_0 : \delta_1^2 = \delta_2^2$$
$$H_1 : \delta_1^2 \neq \delta_2^2$$

A. variant of the experimental class sample by using brainstorming technique is:

$$n = 20$$
  

$$\sum xi = 615$$
  

$$\sum_{xi} 2 = 20275$$

So:

$$S^{2} = \frac{n\Sigma xi^{2} - (\Sigma xi)}{n(n-1)}$$
$$= \frac{20(20275) - (615)^{2}}{20(20-1)}$$
$$= \frac{405500 - 378225}{20(19)}$$
$$= \frac{27275}{380}$$
$$= 71,77$$

B.Variant of the control class sample by using outlining technique is:

$$n = 20$$
  

$$\sum xi = 610$$
  

$$\sum_{xi} 2 = 20100$$

So:

$$S^{2} = \frac{n\Sigma x_{1}^{2} - (\Sigma x_{1})^{2}}{n(n-1)}$$
$$= \frac{20(20100) - (610)^{2}}{20(20-1)}$$
$$= \frac{402000 - 372100}{20(19)}$$
$$= \frac{29900}{380}$$
$$= 78,68$$

The Formula was used to test hypothesis was:

$$F = \frac{The Biggest Variant}{The Smallest Variant}$$

So:

$$F = \frac{78,68}{71,77} = 1,096$$

After doing the calculation, researcher found that  $F_{count} = 1,096$  with  $\alpha$  5 % and dk = 20 from the distribution list F, researcher found that  $F_{table} = 1,68$ , cause  $F_{count} < F_{table}$  (1,096 < 1,68). So, there is no difference the variant between the first class as experimental class by using brainstorming technique and the second class as control class by outlining technique.

# **HOMOGENEITY TEST (POST-TEST)**

Calculation of parameter to get variant of the first class as experimental class sample by using brainstorming technique and variant of the second class as control class sample by using outlining technique were used homogeneity test by using formula:

S<sup>2</sup> = 
$$\frac{n\Sigma xi^2 - (\Sigma xi)}{n(n-1)}$$
  
Hypothesis:

$$\begin{array}{ll} \mathbf{H}_0 & : \ \boldsymbol{\delta}_1^2 = \boldsymbol{\delta}_2^2 \\ \mathbf{H}_1 & : \ \boldsymbol{\delta}_1^2 \neq \boldsymbol{\delta}_2^2 \end{array}$$

A. variant of the experimental class sample by using brainstorming technique is:

n = 20  

$$\sum xi = 1230$$
  
 $\sum xi 2 = 77850$   
 $S^2 = n\sum xi^2 - (\sum xi)^2$   
 $= \frac{20(77850) - (1230)^2}{20(20 - 1)}$   
 $= \frac{1557000 - 1512900}{20(19)}$   
 $= \frac{44100}{380}$   
 $= -116,05$ 

B. Variant of the control class sample by using outlining technique is:

n = 20  

$$\sum xi = 925$$

$$\sum xi 2 = 46625$$

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

$$= \frac{20(46625) - (925)^{2}}{20(20-1)}$$

$$= \frac{932500 - 855625}{20(19)}$$

$$= \frac{76875}{380}$$

$$= 202,3$$

The formula was used to test hypothesis was:

 $F = \frac{The Biggest Variant}{The Smallest Variant}$ 

So:

$$F = \frac{202,3}{116,05} = 1,743$$

After doing the calculation, reseracher found that  $F_{count} = 1,743$  with  $\alpha$  5 % and dk = 20 from the distribution list F, researcher found that  $F_{table} = 1,74$ , cause  $F_{count} < F_{table}$  (1,743 > 1,74). So, there is difference the variant between experimental class by using brainstorming technique and control class by using outlining technique.

No	Student's	Pre test						Post test							
	initial	G	V	М	FL	FO	X	x <sup>2</sup>	G	V	М	FL	FO	Х	x <sup>2</sup>
1	АН	10	10	10	10	10	50	2500	15	15	15	15	15	75	5625
2	AR	5	10	5	5	5	35	1225	15	10	10	10	10	55	3025
3	AT	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
4	AN	5	5	5	5	5	25	625	20	15	15	15	20	85	7225
5	DR	10	5	5	5	5	30	900	15	10	10	10	15	60	3600
6	EA	10	5	5	5	5	30	900	15	10	10	10	10	55	3025
7	HS	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
8	LD	5	5	5	5	5	25	625	15	15	10	10	15	65	4225
9	MA	10	5	5	5	5	30	900	10	15	15	15	15	70	4900
10	ND	10	10	5	5	5	35	1225	15	15	15	10	10	65	4225
11	RH	5	5	5	5	5	25	625	10	15	10	10	10	55	3025
12	RU	10	15	10	10	10	55	3025	15	15	20	15	20	85	7225
13	RZ	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
14	SA	5	5	5	5	5	25	625	15	15	10	10	15	65	4225
15	SA	5	5	5	5	10	30	900	10	15	10	10	10	65	4225
16	SC	10	10	5	5	5	35	1225	15	15	10	10	10	60	3600
17	SW	5	10	10	5	5	35	1225	10	10	15	10	15	60	3600
18	SY	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
19	ТА	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
20	YA	5	5	5	5	5	25	625	15	15	15	10	10	65	4225
		Т	OTAL			•	615	20275						1230	77850

# The Score of Experimental Class by Using Brainstorming Technique

No	Student's	Pre test							Post test						
	initial	G	V	Μ	FL	FO	Х	$\mathbf{x}^2$	G	V	М	FL	FO	х	$\mathbf{x}^2$
1	AS	5	5	5	5	5	25	625	10	10	10	5	5	40	1600
2	AP	5	5	5	5	5	25	625	5	5	5	5	5	25	625
3	AT	5	5	5	5	5	25	625	10	10	10	10	10	10	2500
4	BS	5	5	5	5	5	25	625	5	5	5	5	5	25	625
5	CW	10	10	5	5	10	40	1600	15	15	15	10	15	70	4900
6	HA	5	5	5	5	5	25	625	10	5	5	5	5	30	900
7	HS	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
8	IH	5	5	5	5	5	25	625	5	5	5	5	5	25	625
9	KH	10	10	10	10	10	50	2500	15	15	15	10	10	65	4225
10	LA	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
11	LM	5	5	5	5	5	25	625	10	5	5	5	5	30	900
12	MA	5	5	5	5	10	30	900	10	10	10	10	10	50	2500
13	MS	10	5	5	10	5	35	1225	10	5	5	10	10	40	1600
14	PI	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
15	PP	10	10	5	5	5	35	1225	10	10	10	10	10	50	2500
16	RM	10	10	10	10	10	50	2500	10	10	10	10	10	50	2500
17	RT	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
18	RY	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
19	SH	5	5	5	5	5	25	625	10	10	10	10	10	50	2500
20	SY	10	10	10	10	5	45	2025	15	15	15	15	15	75	5625
	TOTAL				610	20100						925	46625		

# The Score of Control Class by Using Outlining Technique

# Result of the Normality Test of Experimental Class by Using Brainstorming Tehnique in Pre-Test

- 1. The score of experiment class in pre test from low score to high score:
  - 2525252525252525252530303030353535355055
- 2. High = 55 Low = 25 = High - Low Range = 55 - 25= 30  $= 1 + 3,3 \log(n)$ 3. Total of Classes  $= 1 + 3,3 \log(20)$ = 1 + 3,3 (1,30)= 1 + 4,29= 5,29= 5 4. Length of Classes  $=\frac{range}{total of class}$   $=\frac{30}{6}=5$
- 5. Mean

Interval Class	f	Х	x	fx	x <sup>'2</sup>	fx' <sup>2</sup>
25 – 29	10	27	2	20	4	40
30 - 34	4	32	1	4	1	4
35 - 39	4	37	0	0	0	0
40-44	0	-	-	-	-	-
45 - 49	0	-	-	-	-	-
50 - 54	1	52	-1	-1	1	1
55 - 59	1	57	-2	-2	4	4

<i>i</i> = 5	20		-21	49

$$Mx = M^{1} + i \frac{\Sigma f x^{1}}{N}$$
  
= 37 + 5 ( $\frac{21}{20}$ )  
= 37 + 5 (1,05)  
= 37 + 5,25  
= 42,25  
$$SD_{t} = i \sqrt{\frac{\Sigma f x^{2}}{N}} - \left[\frac{\Sigma f x'}{N}\right]^{2}$$
  
=  $5 \sqrt{\frac{49}{20}} - \left[\frac{21}{20}\right]^{2}$   
=  $5 \sqrt{2,45} - (1,05)^{2}$   
=  $5 \sqrt{2,45} - (1,05)^{2}$   
=  $5 \sqrt{1,35}$   
= 5 (1,16)  
= 5,8
Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(\underline{f_0}\underline{-}\underline{f_h})}{f_h}$
55.50	59,5	2,97	0,4948	0.0170	0.210	1	0.14
55-59	54.5	2.11	0.4826	0,0159	0,318	1	2,14
50-54	0 1,0	2,11	0,1020	0,0882	1,764	1	-0,43
45 40	49,5	1,25	0,3944	0.2464	4 0 2 9	0	1
45-49	44.5	0.38	0.1480	0,2404	4,928	0	-1
40-44	y -	- ,	- ,	-0,0328	-0,656	0	-1
35 30	39,5	-0,47	0,1808	0 2274	1 5 1 8	4	1 87
55-59	34,5	-1,33	0,4082	-0,2274	-4,540	4	-1,07
30-34				-0,0505	-1,01	4	-4,96
25-29	29,5	-2,19	0,4857	-0.0132	-0.264	10	-38 87
25 27	24,5	-3,06	0,4989	0,0152	0,204	10	50,07
							45.00
							-45.99

Table of the Frequency Distribution is Expected and Observation

Based on table above, reseracher found that  $x_{count}^2 = -45,99$  while  $x_{table}^2 = 5,99$ , cause  $x_{count}^2 < x_{table}^2$  (-45,99< 5,99) with degree of freedom dk = 5 - 3 = 2 and significant level  $\alpha = 5\%$ . So distribution of experimental class by using group work strategy (Pre-test) is normal.

#### 6. Median

No	Interval of Classes	F	fk
1	25-29	10	10
2	30-34	4	14
3	35-39	4	18
4	40-44	0	18
5	45-49	0	18
6	50-54	1	19
7	55-59	1	20

Explanation :

Me = Bb + i 
$$\left(\frac{n/2 - F}{fm}\right)$$

Me = Median

Bb = Low limit of the interval median conceives Me

- Fm = Frequency of class conceives Me
- F = Frequency of cumulative before interval of classes conceives Me
- i = Length of classes
- n = Total of sample

Position of Me in the interval of classes is number 2, that:

So:

Me = Bb + i 
$$\left(\frac{n/2 - F}{fm}\right)$$
  
= 49,5 + 5  $\left(\frac{10 - 18}{1}\right)$   
= 49,5 + 5 (-8)  
= 49,5 + (-40)  
= 9,5

7. Modus = 25

# Result of the Normality Test of Control Class by using Outlining Technique in Pre-Test

- 1. The score of experiment class in pre test from low score to high score:
  - 252525252525252525252525252530353540455050
- 2. High = 50 = 25 Low = High - Low Range = 50 - 25= 25  $= 1 + 3,3 \log(n)$ 3. Total of Classes  $= 1 + 3,3 \log(20)$ = 1 + 3,3 (1,30)= 1 + 4,29= 5,29 = 5 4. Length of Classes  $=\frac{range}{total \ of \ class}$  $=\frac{25}{5}=5$ 
  - 5. Mean

Interval Class	f	Х	, X	fx	x' <sup>2</sup>	fx <sup>'2</sup>
25 – 29	13	27	3	24	9	117
30 - 34	1	32	2	2	4	4
35 - 39	2	37	1	4	1	2
40-44	1	42	0	0	0	0
45 - 49	1	47	-1	-1	1	1
50 - 54	2	52	-2	-2	2	4
<i>i</i> = 5	20			25		128

$$Mx = M^{1} + i \frac{\Sigma f x^{1}}{N}$$
  
= 42 + 5( $\frac{25}{20}$ )  
= 42 + 5 (1,25)  
= 42 + 625  
= 48,25  
SD<sub>t</sub> = i  $\sqrt{\frac{\Sigma f x'^{2}}{N}} - \left[\frac{\Sigma}{N}\right]$ 

$$SD_{t} = i \sqrt{\frac{\Sigma f x'^{2}}{N}} - \left[\frac{\Sigma f x'}{N}\right]^{2}$$
$$= 5 \sqrt{\frac{128}{20}} - \left[\frac{25}{20}\right]^{2}$$
$$= 5 \sqrt{6.4} - (1.25)^{2}$$
$$= 5 \sqrt{6.4} - 1.5$$
$$= 5 \sqrt{4.9}$$
$$= 5(2.221)$$
$$= 11.05$$

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(\underline{f_0}\underline{-}\underline{f_h})}{f_h}$
50 - 54	54,5	3,83	0,4999	0.0003	0.006	2	332 33
50-54	50,5	3,37	0,4996	0,0005	0,000	2	552,55
45 - 49	15.5	2 79	0 / 97/	0,0022	0,044	1	21,72
40 - 44	-Э,Э	2,19	0,4774	0,011	0,22	1	3,54
35 - 39	40,5	2,21	0,4864	0.039	0.78	2	1 56
35 37	35,5	1,62	0,4474	0,055	0,70	2	1,50
30 - 34	30.5	1 04	0 3508	0,0966	1,932	1	-0,482
25 - 29	50,5	1,01	0,5500	0,2177	4,354	13	1,98
	24,5	0,34	0,1331				
	I		1	1		1	360,648

Table of the Frequency Distribution is Expected and Observation

Based on table above, reseracher found that  $x_{count}^2 = 360,648$  while  $x_{table}^2 = 5,991$  cause  $x_{count}^2 > x_{table}^2$  (360,648 > 5,991) with degree of freedom dk = 5 - 3 = 2 and significant level  $\alpha = 5\%$ . So distribution of experimental class by using group work strategy (Pre-test) is normal.

#### 6. Median

No	Interval of Classes	F	fk
1	25-29	13	13
2	30-34	1	14
3	35-39	2	16
4	40-44	1	17
5	45-49	1	18
6	50-54	2	20

Position of Me in the interval of classes is number 3, that:

So:

Me = Bb + i 
$$\left(\frac{n/2 - F}{fm}\right)$$
  
= 29,5 + 5  $\left(\frac{10 - 13}{1}\right)$   
= 29,5 + 5 (-3)  
= 29,5 + (-15)  
= 14,5

7. Modus = 25

#### Result of the Normality Test of Experimental Class by Using Brainstorming Technique in Post-Test

1. The score of experiment class in pre test from low score to high score: 50 50 50 50 50

	50 50	50	50	50			
	55 55	55	60	60			
	60 60	65	65	65			
	65 70	75	85	85			
2.	High		= 85				
	Low		= 50				
	Range		= Hig	gh –	- Low		
				=	= 85 - 50		
				=	= 35		
3.	Total o	f Cla	sses	=	$= 1 + 3,3 \log(n)$		
				=	= 1 + 3,3 log (20)		
				=	= 1 + 3,3 (1,30)		
				=	= 1 + 4,29		
				=	= 5,29		
				=	= 5		
Δ	Length	of $C$	lasse	ç –	range	_ 35	7
7.	Lengui	or C	14350	. –	total of class	5 5	,

5. Mean

Interval Class	f	Х	x	fx	x <sup>2</sup>	fx <sup>'2</sup>
50 - 55	5	53.5	1	5	1	5
56 - 61	7	58,5	0	0	0	0
62 – 67	4	64,5	-1	-4	1	4
68 – 73	1	70,5	-2	-2	4	4
74 – 79	1	76,5	-3	-3	9	9
80 - 85	2	82,5	-4	-8	32	64
<i>i</i> = 7	20			-12		86

$$Mx = M^{1} + i \frac{\Sigma f x^{1}}{N}$$
  
= 58,5+ 6( $\frac{-12}{20}$ )  
= 58,5+ 6(-0,6)  
= 58,5+ (-3,6)  
= 54,9

$$SD_{t} = i \sqrt{\frac{\Sigma f x'^{2}}{N}} - \left[\frac{\Sigma f x'}{N}\right]^{2}$$
  
=  $7 \sqrt{\frac{86}{20} - \left[\frac{-12}{20}\right]^{2}}$   
=  $7 \sqrt{4,3 - (0,6)^{2}}$   
=  $7 \sqrt{4,3 - 0,36}$   
=  $7 \sqrt{3,94}$   
=  $7 (1,98)$   
=  $13,86$ 

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(\underline{f_0}\underline{-}\underline{f_h})}{f_h}$
	85,5	2,20	0,4861		0.10		• • • •
80-85	79 5	1 77	0.4616	0,0245	0,49	2	3,08
74-79	17,5	1,77	0,4010	0,0517	1,034	1	-0,03
	73,5	1,34	0,4099	0.0010			0.45
68-73	67.5	0.91	0 3186	0.0913	1,826	1	-0,45
62-67	07,5	0,71	0,5100	0,0996	1,992	4	1,01
<b>-</b> 1	61,5	0,58	0,2190	0.0000	0 7 4	_	0.1.6
56-61	55 5	0.47	0 1808	0,0382	0,764	7	8,16
50-55	55,5	0,47	0,1000	0,0291	0,582	5	7,59
	49,5	-0,39	0,1517				
							10.26
							19,36

Table of the Frequency Distribution is Expected and Observation

Based on table above, reseracher found that  $x_{count}^2 = 19,36$  while  $x_{table}^2 = 9,488$  cause  $x_{cause}^2 > x_{table}^2$  (19,36 > 9,488) with degree of freedom dk = 7 - 3 = 4 and significant level  $\alpha = 5\%$ . So distribution of experimental class by using group work strategy (Post-test) is normal.

## 6. Median

No	Interval of Classes	F	fk
1	50-55	5	5
2	56-61	7	12
3	62-67	4	16
4	68-73	1	17
5	74-79	1	18
6	80-86	2	20

Position of Me in the interval of classes is number 2, that:

So:

Me = Bb + i 
$$\left(\frac{\frac{n}{2} - F}{fm}\right)$$
  
= 61,5 + 7  $\left(\frac{10 - 5}{4}\right)$   
= 61,5 + 7 (5/4)  
= 61,5 + 7 (1,25)  
= 61,5 + 8,75  
= 70.25

7. Modus = 50

#### APPENDIX X

# Result of the Normality Test of Control Class by using Conventional Strategy in Post-Test

- 1. The score of experiment class in pre test from low score to high score:
  - 252525303040405050505050505050505050657075
- 2. High = 75 = 25 Low = High - Low Range = 75 - 25= 50 3. Total of Classes  $= 1 + 3,3 \log(n)$  $= 1 + 3,3 \log(20)$ = 1 + 3,3 (1,30)= 1 + 4,29= 5,29 = 5 4. Length of Classes  $=\frac{range}{total of class}$   $=\frac{50}{5}=10$ 
  - 5. Mean

Interval Class	F	Х	x	fx	x <sup>'2</sup>	fx <sup>2</sup>
25 - 34	5	30	2	10	4	20
35 - 44	2	40	1	2	1	2
45 - 54	10	50	0	0	0	0
55 - 64	0	-	-	-		-
65 – 74	1	70	-1	-1	1	1
75 - 84	2	80	-2	-4	16	32
<i>i</i> = 10	20			9		55

$$Mx = M^{1} + i \frac{\Sigma f x^{1}}{N}$$
  
= 50 + 10( $\frac{7}{20}$ )  
= 50 + 10(0,35)  
= 50 + (3,5)  
= 53,5

$$SD_{t} = i \sqrt{\frac{\Sigma f x'^{2}}{N}} - \left[\frac{\Sigma f x'}{N}\right]^{2}$$
$$= 10 \sqrt{\frac{55}{20}} - \left[\frac{7}{20}\right]^{2}$$
$$= 10 \sqrt{2,75} - (0,1225)^{2}$$
$$= 10 \sqrt{2,6275}$$
$$= 10 (1,62)$$
$$= 16,2$$

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(\underline{f_0}\underline{-}\underline{f_h})}{f_h}$
	84,5	1,91	0,4719				
75-84	745	1 20	0.4015	0,0704	1,408	2	0,42
65-74	74,5	1,29	0,4015	0 1529	3 058	1	-0.67
03-74	64.5	0,67	0,2486	0,1527	5,050	1	-0,07
55-64		- ,	- 7	0,2247	4,494	0	-1
	54,5	0,06	0,0239				
45-54	52.5	0.55	0.2000	-0,1849	-3,698	10	-3.70
35-44	55,5	-0,55	0,2088	-0 1702	-3 404	2	-1 58
55 ++	44,5	-1,17	0,3790	0,1702	5,404	2	1,50
25-34	·	,	,	-0,0843	-1,686	5	-3,96
	24,5	-1,79	0,4633				
			1				-10,49

Table of the Frequency Distribution is Expected and Observation

Based on table above, reseracher found that  $x_{count}^2 = -10,49$  while  $x_{table}^2 = 14,067$ , cause  $x_{count}^2 > x_{table}^2$  (-10,49 < 14,067) with degree of freedom dk = 10 - 3 = 7 and significant level  $\alpha = 5\%$ . So distribution of control class by using discourse method (Post-test) is normal.

#### 6. Median

No	Interval of Classes	F	fk
1	25-34	5	5
2	35-44	2	7
3	45-54	10	17
4	55-64	0	17
5	65-74	1	18
6	75-84	2	20

Position of Me in the interval of classes is number 2, that:

So:

Me = Bb + i 
$$\left(\frac{n/2 - F}{fm}\right)$$
  
= 64,5 + 10  $\left(\frac{10 - 17}{1}\right)$   
= 64,5 + 10 (-7)  
= 64,5 + (-70)  
= -5,5

7. Modus = 50

#### **HOMOGENEITY TEST (PRE-TEST)**

Calculation of parameter to get variant of the first class as experimental class sample by using group work strategy and variant of the second class as control class sample by using conventional strategy are used homogeneity test by using formula:

$$S^{2} = \frac{n\Sigma xi^{2} - (\Sigma xi)}{n(n-1)}$$

Hypothesis:

$$H_0 : \delta_1^2 = \delta_2^2$$
$$H_1 : \delta_1^2 \neq \delta_2^2$$

A. variant of the experimental class sample by using brainstorming technique is:

$$n = 20$$
  

$$\sum xi = 615$$
  

$$\sum_{xi} 2 = 20275$$

So:

$$S^{2} = \frac{n\Sigma xi^{2} - (\Sigma xi)}{n(n-1)}$$
$$= \frac{20(20275) - (615)^{2}}{20(20-1)}$$
$$= \frac{405500 - 378225}{20(19)}$$
$$= \frac{27275}{380}$$
$$= 71,77$$

B.Variant of the control class sample by using outlining technique is:

$$n = 20$$
  

$$\sum xi = 610$$
  

$$\sum xi 2 = 20100$$

So:

$$S^{2} = \frac{n\Sigma x_{1}^{2} - (\Sigma x_{1})^{2}}{n(n-1)}$$
$$= \frac{20(20100) - (610)^{2}}{20(20-1)}$$
$$= \frac{402000 - 372100}{20(19)}$$
$$= \frac{29900}{380}$$
$$= 78,68$$

The Formula was used to test hypothesis was:

$$F = \frac{The Biggest Variant}{The Smallest Variant}$$

So:

$$F = \frac{78,68}{71,77} = 1,096$$

After doing the calculation, researcher found that  $F_{count} = 1,096$  with  $\alpha$  5 % and dk = 20 from the distribution list F, researcher found that  $F_{table} = 1,68$ , cause  $F_{count} < F_{table}$  (1,096 < 1,68). So, there is no difference the variant between the first class as experimental class by using brainstorming technique and the second class as control class by outlining technique.

#### **HOMOGENEITY TEST (POST-TEST)**

Calculation of parameter to get variant of the first class as experimental class sample by using brainstorming technique and variant of the second class as control class sample by using outlining technique were used homogeneity test by using formula:

S<sup>2</sup> = 
$$\frac{n\Sigma xi^2 - (\Sigma xi)}{n(n-1)}$$
  
Hypothesis:

$$\begin{array}{ll} \mathbf{H}_0 & : \ \boldsymbol{\delta}_1^2 = \boldsymbol{\delta}_2^2 \\ \mathbf{H}_1 & : \ \boldsymbol{\delta}_1^2 \neq \boldsymbol{\delta}_2^2 \end{array}$$

A. variant of the experimental class sample by using brainstorming technique is:

n = 20  

$$\sum xi = 1230$$
  
 $\sum xi 2 = 77850$   
 $S^2 = n\sum xi^2 - (\sum xi)^2$   
 $= \frac{20(77850) - (1230)^2}{20(20 - 1)}$   
 $= \frac{1557000 - 1512900}{20(19)}$   
 $= \frac{44100}{380}$   
 $= -116,05$ 

B. Variant of the control class sample by using outlining technique is:

n = 20  

$$\sum xi = 925$$

$$\sum xi 2 = 46625$$

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

$$= \frac{20(46625) - (925)^{2}}{20(20-1)}$$

$$= \frac{932500 - 855625}{20(19)}$$

$$= \frac{76875}{380}$$

$$= 202,3$$

The formula was used to test hypothesis was:

 $F = \frac{The Biggest Variant}{The Smallest Variant}$ 

So:

$$F = \frac{202,3}{116,05} = 1,743$$

After doing the calculation, reseracher found that  $F_{count} = 1,743$  with  $\alpha$  5 % and dk = 20 from the distribution list F, researcher found that  $F_{table} = 1,74$ , cause  $F_{count} < F_{table}$  (1,743 > 1,74). So, there is difference the variant between experimental class by using brainstorming technique and control class by using outlining technique.

# T<sub>test</sub>OF THE BOTH AVERAGES IN PRE-TEST

The formula was used to analyse homogeneity test of the both averages was t-test, that:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt[5]{\frac{1}{n_1} + \frac{1}{n_2}}} \text{ with } S = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 2)S_2^2}{n_1 + n_2 - 2}}$$
  
So:  
$$S = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 2)S_2^2}{n_1 + n_2 - 2}}$$

$$= \sqrt{\frac{(20-1)(71,77) + (20-2)(78,68)}{20+20-2}}$$
$$= \sqrt{\frac{19(71,77) + 18(78,68)}{20+18}}$$
$$= \sqrt{\frac{1363,63 + 1416,24}{38}}$$
$$= \sqrt{\frac{2779,87}{38}}$$

$$=\sqrt{73,154}$$
  
= 8,553

So:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt[5]{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$= \frac{42,25 - 48,25}{\sqrt[8,553]{\frac{1}{20} + \frac{1}{20}}}$$
$$= \frac{-6}{\sqrt[8,553]{0,05 + 0,05}}$$
$$= \frac{-6}{\sqrt[8,553]{0.1}}$$
$$= \frac{-6}{0,8553}$$
$$= -7.015$$

Based on researcher calculation result of the homogeneity test of the both averages, researcher found that  $t_{count} = -7,015$  with opportunity  $(1-\alpha) = 1 - 5\% = 95\%$  and dk =  $n_1 + n_2 - 2 = 20 + 20 - 2 = 38$ , reseracher found that  $t_{table} = 1,68$ , cause  $t_{count} < t_{table}$  (-7,015 < 1,68). So, H<sub>0</sub> was accepted, it means that there is no significant difference of brainstorming technique and outlining technique in students' descriptive writing ability.

# T<sub>test</sub>OF THE BOTH AVERAGES IN PRE-TEST

The formula was used to analyse homogeneity test of the both averages was t-test, that:

$$t = \frac{\overline{X}_{1} - \overline{X}_{2}}{\sqrt[5]{\frac{1}{n_{1}} + \frac{1}{n_{2}}}} \text{ with } S = \sqrt{\frac{(n_{1} - 1)S_{1}^{2} + (n_{2} - 2)S_{2}^{2}}{n_{1} + n_{2} - 2}}$$
  
So:  
$$S = \sqrt{\frac{(n_{1} - 1)S_{1}^{2} + (n_{2} - 2)S_{2}^{2}}{n_{1} + n_{2} - 2}}$$

$$= \sqrt{\frac{(20-1)(71,77) + (20-2)(78,68)}{20+20-2}}$$
$$= \sqrt{\frac{19(71,77) + 18(78,68)}{20+18}}$$
$$= \sqrt{\frac{1363,63 + 1416,24}{38}}$$
$$= \sqrt{\frac{2779,87}{38}}$$
$$= \sqrt{73,154}$$
$$= 8,553$$

So:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt[5]{\frac{1}{n_1} + \frac{1}{n_2}}}$$

_	42,25 - 21,5
_	$\sqrt[8,553]{\frac{1}{20} + \frac{1}{20}}$
_	20,75
	$\sqrt[8,553]{0,05+0,05}$
=	20,75
	<sup>8,553</sup> √0.1
=	20,75
	0,08553
=	242,604

Based on researcher calculation result of the homogeneity test of the both averages, researcher found that  $t_{count} = 242,604$  with opportunity  $(1-\alpha) = 1 - 5\% = 95\%$  and dk =  $n_1 + n_2 - 2 = 20 + 20 - 2 = 38$ , reseracher found that  $t_{table} = 1,68$ , cause  $t_{count} < t_{table}$  (242,604 > 1,68). So, H<sub>0</sub> was not accepted, it means that there is no significant difference of brainstorming technique and outlining technique in students' descriptive writing ability.

## T<sub>test</sub> OF THE BOTH AVERAGES IN POST – TEST

To test difference test of the both averages was used t-test formula, that:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt[5]{\frac{1}{n_1} + \frac{1}{n_2}}} \text{ with } S = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}}$$

H<sub>0</sub> is accepted if  $t \ge t_{(1-a)(n1+n2)}$  with opportunity  $(1-\alpha) = 1 - 5 = 95$  % and dk = (n1 + n2 - 2)

So:

$$S = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 2)S_2^2}{n_1 + n_2 - 2}}$$
$$= \sqrt{\frac{(20 - 1)(116,05) + (20 - 2)(202,3)}{20 + 20 - 2}}$$
$$= \sqrt{\frac{19(116,05) + 18(202,3)}{20 + 18}}$$
$$= \sqrt{\frac{2204,95 + 3641,4}{38}}$$
$$= \sqrt{\frac{5846,35}{38}}$$
$$= \sqrt{153,85}$$
$$= 12,403$$

So:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt[5]{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$= \frac{54,9-21,5}{\sqrt{120}+\frac{1}{20}}$$
$$= \frac{33,4}{\sqrt{12,403}\sqrt{0,05+0,05}}$$
$$= \frac{33,4}{\sqrt{12,403}\sqrt{0,1}}$$
$$= \frac{33,4}{1,2403}$$
$$= 26,928$$

•

Based on calculation result of the difference test of the both averages, researcher found that  $t_{count} = 26,928$  with opportunity  $(1-\alpha) = 1 - 5\% = 95\%$  and dk  $= n_1 + n_2 - 2 = 20 + 20 - 2 = 38$ , and researcher found that  $t_{table} = 1,68$ , cause  $t_{count} > t_{table}$  (26,928 > 1,68). So, H<sub>a</sub> was accepted, it means there was the difference average between the first class as experimental class and the second class as control class in this research.

The researcher get the data, it enter in frequency table with the formula as follows: The formula of test "t" is as follws:

$$Tt = \frac{M_1 - M_2}{\sqrt{\left(\frac{\Sigma X_1 + \Sigma X_2^2}{n_1 + n_2 - 2}\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

- T : The value which the statistical significance
- M 1 : The average score of the experiment class
- M<sub>2</sub> : The average score of the control class
- X<sub>1</sub> : Deviation of the experiment class
- X<sub>2</sub> : Deviation of the control class
- n<sub>1</sub> : Number of experiment
- $n_2$  : Number of control.

$$Tt = \frac{M_1 - M_2}{\sqrt{\left(\frac{\Sigma X_1 + \Sigma X_2^2}{n_1 + n_2 - 2}\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$
$$= \frac{54,9 - 53,5}{\sqrt{\left(\frac{10,01 + 16,2^2}{20 + 20 - 2}\right)\left(\frac{1}{20} + \frac{1}{20}\right)}}$$
$$= \frac{1,4}{\sqrt{\left(\frac{10,01 + 262,44}{38}\right)\left(0,05 + 0,05\right)}}$$

$$= \frac{1,4}{\sqrt{\left(\frac{272,45}{38}\right)(0,1)}}$$
$$= \frac{1,4}{\sqrt{(7,29)(0,1)}}$$
$$= \frac{1,4}{\sqrt{0.729}}$$
$$= \frac{1,4}{0.85}$$

Two Tail Test									
	0,50	0,20	0,10	0,05	0,02	0,01			
One Tail Test									
dk	0,25	0,10	0,005	0,025	0,01	0,05			
1	1,000	3,078	6,314	12,706	31,821	63,657			
2	0,816	1,886	2,920	4,303	6,965	9,925			
3	0,765	1,638	2,353	3,182	4,541	5,841			
4	0,741	1,533	2,132	2,776	3,747	4,604			
5	0,721	1,486	2,015 2,571		3,365	4,032			
6	0,718	1,440	1,943 2,447		3,143	3,707			
7	0,711	1,415	1,895 2,365		2,998	3,499			
8	0,706	1,397	1,860	2,306	2,896	3,355			
9	0,703	1,383	1,833	2,262	2,821	3,250			
10	0,700	1,372	1,812	2,228	2,764	3,165			
11	0,697	1,363	1,796 2,201		2,718	3,106			
12	0,695	1,356	1,782	2,178	2,681	3.055			
13	0,692	1,350	1,771 2,160		2,650	3.012			
14	0,691	1,345	1,761	2,145	2,624	2,977			
15	0,690	1,341	1,753	2,132	2,623	2,947			
16	0,689	1,337	1,746	2,120	2,583	2,921			
17	0,688	1,333	1,743	2,110	2,567	2,898			
18	0,688	1,330	1,740	2,101	2,552	2,878			
19	0,687	1,328	1,729	2,093	2,539	2,861			
20	0,687	1,325	1,725	2,086	2,528	2,845			
21	0,686	1,323	1,721	2,080	2,518	2,831			
22	0,686	1,321	1,717	2,074	2,508	2,819			
23	0,685	1,319	1,714	2,069	2,500	2,807			
24	0,685	1,318	1,711	2,064	2,492	2,797			
25	0,684	1,316	1,708	2,060	2,485	2,787			
26	0,684	1,315	1,706	2,056	2,479	2,779			
27	0,684	1,314	1,703	2,052	2,473	2,771			
28	0,683	1,313	1,701	2,048	2,467	2,763			
29	0,683	1,311	1,699	2,045	2,462	2,756			
30	0,683	1,310	1,697	2,042	2,457	2,750			
40	0,681	1,303	1,684	2,021	2,423	2,704			
60	0,679	1,296	1,671	2,000	2,390	2,660			
120	0,677	1,289	1,658	1,980	2,358	2,617			
$\infty$	0,674	1,282	1,645	1,960	2,326	2,576			

## Percentage Points of the t Distribution

# Appendix 17

# Z-Table

Z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.0000	0.0040	0.0080	0.0120	0.0160	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0753
0.2	0.0793	0.0832	0.0871	0.0910	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.1480	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.1700	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.1950	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.2190	0.2224
0.6	0.2257	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2517	0.2549
0.7	0.2580	0.2611	0.2642	0.2673	0.2704	0.2734	0.2764	0.2794	0.2823	0.2852
0.8	0.2881	0.2910	0.2939	0.2967	0.2995	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.3340	0.3365	0.3389
1.0	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.3770	0.3790	0.3810	0.3830
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.3980	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.4207	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.4370	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4564	0.4573	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.4750	0.4756	0.4761	0.4767
2.0	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.4830	0.4834	0.4838	0.4842	0.4846	0.4850	0.4854	0.4857
2.2	0.4861	0.4864	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.4890
2.3	0.4893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.4920	0.4922	0.4925	0.4927	0.4929	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.4940	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4957	0.4959	0.4960	0.4961	0.4962	0.4963	0.4964

2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.4970	0.4971	0.4972	0.4973	0.4974
2.8	0.4974	0.4975	0.4976	0.4977	0.4977	0.4978	0.4979	0.4979	0.4980	0.4981
2.9	0.4981	0.4982	0.4982	0.4983	0.4984	0.4984	0.4985	0.4985	0.4986	0.4986
3.0	0.4987	0.4987	0.4987	0.4988	0.4988	0.4989	0.4989	0.4989	0.4990	0.4990
3,1	0,4990	0,4991	0,4991	0.4991	0,4992	0,4992	0,4992	0,4992	0,4993	0,4993
3,2	0,4993	0,4993	0,4994	0,4994	0,4994	0,4994	0,4994	0,4995	0,4995	0,4995
3,3	0,4995	0,4995	0,4995	0,4996	0,4996	0,4996	0,4996	0,4996	0,4997	0,4997
3,4	0,4997	0,4997	0,4997	0,4997	0,4997	0,4997	0,4997	0,4997	0,4997	0,4998
3,5	0,4998	0,4998	0,4998	0,4998	0,4998	0,4998	0,4998	0,4998	0,4998	0,4998
3,6	0,4998	0,4998	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999
3,7	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999
3,8	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999	0,4999
3,9	0,5000	0,5000	0,5000	0,5000	0,5000	0,5000	0,5000	0,5000	0,5000	0,5000

# **Chi-Square Table**

dk	Significant level							
	50%	30%	20%	10%	5%	1%		
1	0,455	1,074	1,642	2,706	3,841	6,635		
2	1,386	2,408	3,219	4,605	5,991	9,210		
3	2,366	3,665	4,642	6,251	7,815	11,341		
4	3,357	4,878	5,989	7,779	9,488	13,277		
5	4,351	6,064	7,289	9,236	11,070	15,086		
6	5,348	7,231	8,558	10,645	12,592	16,812		
7	6,346	8,383	9,803	12,017	14,067	18,475		
8	7,344	9,524	11,030	13,362	15,507	20,090		
9	8,343	10,656	12,242	14,684	16,919	21,666		
10	9,342	11,781	13,442	15,987	18,307	23,209		
11	10,341	12,899	14,631	17,275	19,675	24,725		
12	11,340	14,011	15,812	18,549	21,026	26,217		
13	12,340	15,119	16,985	19,812	22,362	27,688		
14	13,339	16,222	18,151	21,064	23,685	29,141		
15	14,339	17,222	19,311	22,307	24,996	30,578		
16	15,338	18,418	20,465	23,542	26,296	32,000		
17	16,338	19,511	21,615	24,769	27,587	33,409		
18	17,338	20,601	22,760	25,989	28,869	34,805		
19	18,338	21,689	23,900	27,204	30,144	36,191		
20	19,337	22,775	25,038	28,412	31,410	37,566		
21	20,337	23,858	26,171	29,615	32,671	38,932		
22	21,337	24,939	27,301	30,813	33,924	40,289		
23	22,337	26.018	28,429	32,007	35,172	41,638		
24	23,337	27,096	29,553	33,196	35,415	42,980		
25	24,337	28,172	30,675	34,382	37,652	44,314		
26	25,336	29,246	31,795	35,563	38,885	45,642		
27	26,336	30,319	32,912	36,741	40,113	46,963		
28	27,336	31,391	34,027	37,916	41,337	48,278		
29	28,336	32,461	35,139	39,087	42,557	49,588		
30	29,336	33,530	36,250	40,256	43,773	50,892		

## PHOTO OF THE RESEARCH SMA N 7 PADANGSIDIMPUAN CLASS XI. IA -1 & XI.IA -2 ACADEMIC YEAR 2014-2015

