THE EFFECT OF PROBABLE PASSAGE STRATEGY ON STUDENTS' READING COMPREHENSION AT GRADE X SMA NEGERI 1 PANYABUNGAN SELATAN

A THESIS

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

Written By:

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ENGLISH EDUCATION DEPARTMENT

TARBIYAH AND TEACHER TRAINING FACULTY
INSTITUTE FOR ISLAMIC STUDIES
PADANGSIDIMPUAN

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2017

Term : Munaqosyah
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Padangsidimpuan, 2 - 11 - 2017

To:
Dean Tarbiyah and
Teacher Training Faculty
In-
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Assalamu'alaikum Wr.Wb.

After reading, studying and giving advice for necessary revision on thesis belongs to **Nirmala Aini**, entitled **"The Effect of Probable Passage Strategy on Students' Reading Comprehension at Grade X SMA Negeri 1 Panyabungan Selatan"**, we approved that the thesis has been acceptable to complete the requirement to fulfill for the degree of Graduate of Education (S.Pd.) in English.

Therefore, we hope that the thesis will soon be examined in front of the Thesis Examiner Team of English Department of Tarbiyah and Teacher Training Faculty IAIN Padangsidimpuan. Thank you.

Wassalamu'alaikum Wr.Wb.

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DECLARATION OF SELF THESIS COMPLETION

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Thesis	**:THE EFFECT OF PROBABLE PASSAGE STRATEGY ON STUDENTS' READING COMPREHENSION AT GRADE X SMA NEGERI 1 PANYABUNGAN SELATAN**
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The Thesis had been accepted as a partial fulfillment of the requirement for the Degree of Graduate Education (S.Pd) in English Program.

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ABSTRACT

In this research, the researcher found that students' mark in reading comprehension was unsatisfied. The students' problem in reading comprehension were: 1) The students were still low in vocabulary, 2) The students got bored in reading and 3) The students were less motivation in reading comprehension. Beside the students' problem, teacher's strategy also became a problem in learning reading comprehension. The teacher still used the conventional strategy in teaching reading comprehension. The purpose of this research was to examine the effect of Probable Passage on Students' Reading Comprehension at Grade X SMA Negeri 1 Panyabungan Selatan.

The approach used in this research was experimental research where the researcher chose two classes as the sample. They were X MIA-2 as experimental class that consisted of 21 students and X MIA-1 as control class that consisted of 22 students. In this research, the researcher gave pre-test and post-test in multiple choose test. Meanwhile, the data were derived from interview, pre-test, and post-test. To analyze the data, the researcher used parametric test with t-test formula.

After the data have been analyzed, the researcher found that the mean score of control was 73.2. The mean score of experimental class using Probable Passage was 79.74. The effect of Probable Passage on students' reading comprehension was 8.175 > 1.6828 with t_0 is higher than t_t. It means H_a was accepted and H_0 was rejected. So, there was a significant effect of Probable Passage strategy on students' reading comprehension at grade X SMA Negeri 1 Panyabungan Selatan.

Keywords: probable passage, strategy, reading comprehension.

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Padangsidimpuan,November , 2017
Researcher

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CHAPTER I

INTRODUCTION

A. Background of the Problem

Reading is the process of cognition, interpretation and perception of a written or printed material. Through reading, the readers can enrich their vocabularies, improve their self and explore the new things. These important are explained in the following paragraphs.

First, the readers can enrich their vocabularies. Through reading, they get explanation about everything and enrich their vocabularies that they can use in their daily activities. So, they can help for delivering their good idea.

Second, the readers can improve their self. Through reading, they understand about their self, for example: how to sharpen their right or left brain, how to memorize things better. It means, the readers can prepare the appropriate text for their read.

Last, the readers can explore new things. Through reading they can explore new information, such as their hobbies, jobs knowledge and advice. It means, reader can get much information through exploring new information to improve their hobbies, jobs, knowledge and advice.

. Reading also can improve cognitive abilities like knowing, comprehending, analyzing and evaluating. While reading, students can take the messages from the text also get the main point of author's purpose and so on

from the text.[1] Through reading, students can gain knowledge that is not presented by teacher in classroom.

In addition, reading is someone's ability in analyze the text.[2] A good reader can analyze which the major sentence, minor sentence and conclusion. So, the good reader can get information well. Reading can define as the action of a person who reads.

Based on illustration above, it shows that reading is necessary for everyone in variety of purpose and needs because the students can learn language well. Base on interview with Mrs. Evi,[3] in fact students in secondary school often find the problem in reading comprehension in SMA Negeri 1 Panyabungan Selatan.

First, students' vocabulary is still low. Passing grade of English in SMA Negeri 1 Panyabungan Selatan is 75. In fact, students only get 60-70. Shortly, students' reading comprehension does not fulfill the expectation. When the researcher asked some students in SMA Negeri 1 Panyabungan Selatan, the students have difficulties in reading comprehension because they don't have some vocabularies. Thus, they are difficult to comprehend the text.

[1]Andrew P Johnson, *Teaching Reading and Writing,* (United States of America: Rowmann and Littlefield, 2008). p 3.

[2]A.S Hornby, *Oxford Advance Learners' Dictionary*, p 968.

[3]Evi Sari Kartika, English Teacher at SMA Negeri 1 Panyabungan Selatan, *Private Interview*. (December 2, 2016 at 08:15 am)

Second, they are easy to get bored in reading text in text book. [4] They are more interest read a text in internet and social media because there is have fun and unique picture. Thus, they don't interest to read the text.

Third, it is about motivation. Some of students have less motivation in reading comprehension. Base on interview with Miss Diah, some of students feel lazy to use English because they usually use their mother language and their traditional language. They are lazy to open the dictionary and wait their teacher to translate a text. So, they are difficult to comprehend the text.

Based on the problem above, it is need to solve in order to avoid flaws in students as product education. The appropriate strategies can make students comprehend a text well. First, an appropriate strategy can make students feel addict to the material. Thus, they can understand it easily. Second, a strategy will help the teacher to teach the students in learning process. Last, a strategy make students feel enjoy and enthusiastic in learning. There are many alternative strategies that can apply in learning process, such as; probable passage, outlining, summarizing, scanning, reviewing, and another.

From the alternative strategies above, the researcher choose the probable passage as a strategy in this research. First, probable passage is an instructional strategy to teach reading trough prediction, discussion, and writing that can help students to make prediction, access background knowledge, see relationship

[4]Diah Lestari, English Teacher at SMA Negeri 1 Panyabungan Selatan, *Private Interview*. (December 2, 2016 at 09:00 am)

between ideas, make inferences, and from picture about what might occur in a reading.[5] Through probable passage strategy, students more easy in read a text because it is not same with conventional strategy in reading only focus read a text well and spread all over.

Second, probable passage has many advantages. Probable passage strategy make students spent the time well.[6] Some students need long time to comprehend a text. The text is consists of the paragraph that should comprehend by the students to answer some questions. For that reason, probable passage strategy can apply to get information quickly without translate the meaning of word one by one.

Then, probable passage strategy is making students are more effective than giving students a list of words and requiring them to use a dictionary to define them one by one.[7] It is purposed to engage students in contextual study of vocabulary before reading a passage. That means the probable passage strategy will help students to understand the vocabulary based on the text. The students will get several lists of vocabularies that they can learn in probable passage strategy.

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[5]June Preszler, *Strategies to Help Struggling Readers* (Black Hills: SD Education Service Agency, 2005). p 6.

[6] *Ibid*, p 7.

[7]Rahmi Fadilah and Rini Hendrita, *The Effect of Probable Passage Strategy in Teaching Reading A Recount Text for Senior High School* Journal Inovasi Pendidikan, Vol. 1. No. 17 Maret 2017, Accessed on May 2nd, 2017

Furthermore, probable passage strategy will help to stop passive reading habits by encouraging students to make prediction, to activate their prior knowledge about a topic, to see casual relationships, to make inferences and to form images about a text. Therefore, the concept of probable passage is how the students can learn to another model of prediction strategy in reading.[8] In this strategy, the students will be active because they will work with probable passage frame that will help them to understand the text.

Based on this case, the researcher has motivation to solve this problem. Therefore the researcher will conduct a research with the title **"The Effect of Probable Passage Strategy on Students' Reading Comprehension at Grade X SMA Negeri 1 Panyabungan Selatan".**

B. Identification of the Problem

Based on explanation above, there are some problems that can be identified. The problem that will be solved is students 'reading comprehension is low. They are;

First, the students' skill in reading comprehension is still low. Second, students don't have many vocabularies. Last, students don't have the appropriate strategy in reading.

[8] *Ibid* p.3.

C. Limitation of the Problem

Based on the identification of the problem above, the researcher limits and focus on using probable passage strategy and it's the effect on reading comprehension at grade X SMA Negeri 1 Panyabungan Selatan.

D. Formulation of the Problem

The problem of this research is: "is there significant effect between Probable Passage Strategy on students' reading comprehension at grade X SMA Negeri 1 Panyabungan Selatan ?"

E. Purpose of the Research

Based on formulation above, the purpose of the researcher is to examine whether there is significant effect of probable passage strategy on students' reading comprehension.

F. Significance of the Research

The researcher has significances to the following areas:

1. For teachers, the result of research gives one suitable strategy that can be used by the teacher to get successful learning. This research would be expected to provide information, which may have practical as well as theoretical values for English teacher. Theoretically, the results of the research inform English teachers in their attempts to decide which of the best strategy in teaching reading.
2. For students, using appropriate strategy in learning make students enjoy to study, it make them to increase their motivation in learning, because one of

the important factor to get successful learning is using the appropriate strategy.

3. For educational field, to increase the quality of education especially in English learning by using appropriate strategy.
4. For other writer, the result of research is can help who will conduct further research in the same topic.

G. Definition of Operational Variables

1. Probable passage strategy: An instructional strategy to teach reading trough prediction, discussion, and writing that can help students to make prediction, access background knowledge, see relationship between ideas, make inferences, and from picture about what might occur in a reading.
2. Reading comprehension: The students ability to construct the meaning or important ideas of the text based on their background knowledge and experiences.

H. Outline Thesis

The systematic of this research is divided into five chapters. Each chapter consists of many subchapters with detail as follow;

1. Chapter one consists of introduction, they are: background of the problem, identification of the problem, limitation of the problem, formulation of the problem, purposes of the research, the significances of the research, definition of operational variables, and outline of the thesis.

2. Chapter two consists of theoretical description, which explains about definition of reading comprehension and the purposes, definition news item text, and definition of probable passage strategy.
3. Chapter three consists of methodology of the research, include in: place and time of the research, research design, population and sample, instrument of the research, instrument validity, technique of collecting data, and technique of analysing data.
4. Chapter four include in findings, discussion, and the threats of the research.
5. Chapter five consists of conclusion and suggestions.

CHAPTER II

THEORITICAL DESCRIPTION

A. The Concept of Probable Passage Strategy

1. The Nature of Probable Passage Strategy

Probable passage strategy is an instructional strategy to teach reading trough prediction, discussion, and writing that can help student to make prediction, access background knowledge, see relationship between ideas, make inferences, and from picture about what might occur in a reading.[1] So, this strategy is to make students become active readers.

Moreover, probable Passage a pre-reading strategy that integrates prediction, summarization, vocabulary instruction and story frame. [2] Additionally, probable passage is a strategy that can help students to make prediction about the text, stay on what they believe, and make them have critical thinking.[3] It is means that the teacher tells the students that they are free to predict the text based on their own writing based on teacher's guide and then make correction on their own word. Thus, the students can have experience how to build a text.

[1]June Preszler, *Strategies to Help Struggling Readers* (Black Hills: SD Education Service Agency, 2005). p 6

[2]Glennw. *Tip of the Week – Probable Passages***.** Accessed on April 3, 2017

[3]Masvani and Muhd. Al-Hafizh, *Journal of English Language Teaching Vol 1 No. 3 Juni 2013, Serie A*

Furthermore, probable passage strategy is a pre reading strategy that gets students engaged by introducing students to text before they meet the text.[4] Probable passage strategy focuses on how to help the teacher introduce the text to the student more effectively.

Furthermore, Woods in Cecil defines probable passage strategy as a teacher prediction strategy that relates writing and critical thinking with the reading of narrative selection. [5] That means, probable passage strategy will be suitable with the genre narrative text, recount text and news item text. Because this strategy will introduce the students with six story elements in probable passage, that is setting, characters, solution, ending and prediction of the story, to construct text by using key words provided by the teacher. All of elements can be seen in probable passage strategy frame.

2. Advantages of Probable Passage Strategy

States to Beers, mentions that probable passage is a brief summary of a text from which key words have been omitted.[6] Beers in Preszler suggests using probable passage strategy is to increase students' comprehension by activating their prior knowledge before they actually begin reading the text.[7]

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[4]Rahmi Fadilah and Rini Hendrita, *The Effect of Probable Passage Strategy in Teaching Reading A Recount Text for Senior High School* Journal Inovasi Pendidikan, Vol. 1. No. 17 Maret 2017, Accessed on May 2nd, 2017

[5]Rahmi Fadilah and Rini Hendrita, *Op.Cit*, p.126

[6]Kylene Beers, *When Kids Can't Read What Teacher Can Do,* (United Stated of America: Acid Free Paper, 2003), p. 87

[7]June Preszler. *Op. Cit*, p. 6.

She also adds that probable passage strategy is important to teach reading, especially for struggling or reluctant readers, before they begin the text.

Then, Daniels says this strategy is more effective than giving students a list of words and requiring them to use a dictionary to define them one by one. It is purpose to engage students in contextual study of vocabulary before reading a passage.[8] That means the probable passage strategy will help students to understand the vocabulary based on the text. The students will get several list of vocabulary that they can learn in probable passage strategy.

Furthermore, Wood in Beers mentions that probable passage will help to stop passive reading habits by encouraging students to make prediction, to activate their prior knowledge about a topic, to see casual relationships, to make inferences and to form images about a text.[9]

Therefore, the concept of probable passage is how the students can learn to another model of prediction strategy in reading. In this strategy, the students will be active because they will work with probable passage frame that will help them to understand the text.

3. Steps of Probable Passage Strategy

There are many steps of probable passage, they are:

a. Choose 10-15 key words or phrase. The words should reflect the main ideas and concepts to be presented in the reading
b. Create categories for students by providing labels. (if possible, label one category unknown for words that are completely unfamiliar to students)

[8]Rahmi Fadilah and Rini Hendrita, *Op.Cit,* p. 128.
[9]Kylene Beers, *Loc. Cit,* p. 87.

c. Divide class into cooperative learning groups. Ask groups to place the key words in the categorize that you've provided
d. Based on the key words and categories, ask students to write a summary or gist statement that explains what they think will learn as they read the material. (decide beforehand if students will need to use all of the key words or phrase except those that fall into the unknown category)
e. The to discover section asks students to detail what they hope to learn or find out regarding the topic and the unknown items as they read
f. Before students actually read the material, go through the group summary statement and discuss to concept students hope to discover or learn more about. Create an overhead to record several summary/gist statements, unknown words, and to discover concepts.
g. After students have read the selection, return to the overhead and review the unknown words. Also ask students if they need to adjust the words in the categories.
h. Ask students to create new summary/gist statements to reflect what they have actually learned.[10]

B. Conventional Strategy

1. Definition of Conventional

Hudson stated that conventional teaching is a method that used by the teachers based on mutual agreement in a school.[11] It uses traditional way in teaching and learning process where the teacher will uses the common way in teaching and learning. Conventional or traditional teaching is concerned with the teacher being the controller of the learning environment. The teacher actually is the leader in the class.

2. Classification of Conventional Strategy

There are many teaching strategy that we can used in teaching and learning process. One of them is conventional or traditional strategy.

[10]June Preszler. *Op. Cit,* p. 6.
[11]Hudson, *The meaning of Conventional Teaching.* Accessed on April 2, 2017).

Conventional strategy can be divided into some strategies, such as: lecturer, project, catechize, discuss, problem solving, homework, recitation, demonstration and experiment, role play, and so on.[12] From those strategies, there is a strategy that is often used by the teacher, such as lecturer strategy. It is a traditional strategy because it has been used for a long time in teaching and learning process. In this strategy, the teacher usually gives all of the explanation of the materials or it is a teacher centered. This traditional strategy, sometimes, will make the students be easier to feel bored.

C. Reading comprehension

1. Definition of Reading Comprehension

Reading comprehension is the process of making sense of text.[13] Reading comprehension is the ability to understand information presented in written form. It is important for the students to become effective reader. Roebl states that "reading comprehension is an ability to understand what the readers read where words have context and texts have meaning".[14] The words or text that relate to the context, the reader interprets it firstly to get the factual interpretation or in reading. The readers' background knowledge also helps the reader to get the comprehension in reading.

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[12]Syaiful Bahri Djamarah, *Strategy Belajar-Mengajar*, (Jakarta: PT. Asdi Mahasatya, 2006). p.83.

[13]Ministry of Education, *A Guide to Effective Instruction in Reading*, (Ontario: Queens Printer, 2003), p. 215.

[14]K. M. Roebl, *Developing Reading Comprehension Skills in EFL University Level Students*, (St. Jhon's University: Taiwan, 2003), p. 177.

Goodman in Otto states that, "reading comprehension is an interaction between thought and language and bases evaluation of succsess in comprehension on the extent to which the readers' reconstructed message agree with the writers' intendeed message".[15] It means that reading comprehension is not only understand the text, but also the reader must reconstruct message what the writer grafts in the text. Furthermore, reading is one of important skills in learning language besides listening, writing and speaking.[16] The main goal of reading is comprehension.

Next, reading comprehension is understanding, evaluating, and utilizing an ideas gained through and interaction between reader and author.[17] Jeremy Harmer states that "reading comprehension is not stopping for every word, not analyzing everithing that the reader or speaker includes in the text, it means the readers are able to take in a stream of discourse and understand the gist of it without worrying too much abou the details.[18]

Based on explanation above, the researcher can conclude that reading comprehension is how to comprehend a written material that containing some information to find what the reader to know and also the information they need. So, students must have activity in comprehend not only text but also in

[15]Wayne Otto, et.al., *How to Teach Reading,* (Phillipines: Addison-Wesley Publishing Company, 1979), p. 151.

[16]David Nunan, *Practical English Language Teaching,* (New York: Mc Grow Hill, 2003), p.68.

[17]Nil B. Smith and H Alan Robinson, *Reading Instruction for Today's Children*, (Englewoo Cliffs: 1980), p.205.

[18]Jeremy Harmer, *The Practice of English Language Teachin,* (Malaysia: Longman, 2003), p. 202.

context. Reading and comprehension cannot separated, because readers need comprehension to get information from the text.

2. The Purpose of Reading

There are some process of reading, they are:

a. Reading for details facts
b. Reading for main idea
c. Reading sequence or organization
d. Reading for inference
e. Reading for classify
f. Reading for evaluate
g. Reading for compare or contrast[19]

Therefore, the purpose of reading is varies. The reader has some purpose to achieve it. Base on those purposes, it is also necessary look the important of reading in which there is a relationship about the importance of reading.

3. Kinds of Reading

a. Silent reading

States to Herny Guntur, "silent reading is process who done and be used by reader to get message from the text". [20] Silent is condition of not speaking and a soundtrack. [21] It is means reading without voice and the move of lips.

[19]Henry Guntur Tarigan, *Membaca Sebagai Suatu Keterampilan Berbahasa*, (Bandung:Angkasa, 1980), p. 8.
[20]H. Douglas Brown, *Language Assesment: Principles and Classroom Practice*, (New York: Pearson Education, 2004), p. 58.
[21]A.S Hornby, *Op. Cit*, p. 887.

b. Loud Reading

States to Henry Guntur , "loud reading is an activity to read use voice and saying and the correct intonation to listener and reader can get information by also, like thinking, feeling, attitude, or writers experience".[22] It is means loud reading is an activity to read a text with sound and move of lips. States to H. Douglas Brown, "loud reading is the test-taker separate letters, word and or short sentences and read them loud, one by one, in the presence of an administrator since the easement is reading comprehension, any recognize sable oral approximation of the target response considered correct".[23] In other word, loud reading is talking out loud to read a text. It can conclude that loud reading is an activity to read a text with oral expression, speaking and talking out loud. Reading aloud also connects the eyes and ears.

4. Types of Reading

There are many types of reading, such as:

a. Perceptive, in keeping with the set of categorize specified for listening comprehension, similar, specification are offered here, except with some differing terminology to capture the uniqueness of reading.
b. Selective, this category is largely an artifact of assessment formats.
c. Interactive, included among interactive reading types are stretches of language of several paragraph to one page or more in which the reader must, in a psycholinguistics sense, interact with the text.
d. Extensive, applies to text or more than a page, up to and concluding professional article, essays, reports, short stories and books.[24]

5. Reading Assessment

[22]Henry, *Op. Cit*, p. 22.
[23]H. Douglas Brown, *Op. Cit*, p. 90.
[24] *Ibid*, p. 189.

The skills and strategies for accomplishing reading emerge as a crucial consideration in the assessment ability. There are micro and macro skill in reading comprehension:

Micro skills are:

a. Discriminate among the distinctive graphemes and orthographic patterns of English
b. Retain chunks of language different length in short-term memory
c. Process writing at an efficient rate suit the purpose
d. Recognize a core of words and interpret words order patterns and their significance
e. Recognize grammatical words classes, system patterns, and elliptical forms
f. Recognize that particular meaning may be expressed in different grammatical forms
g. Recognize cohesive devices in written discourse and their role in signaling the relationship between and among clues[25]

Macro skills are:

a. Recognize the theoretical forms of written discourse and their significance for interpretation
b. Recognize the communicative function of written text, states to form and purpose
c. Infer context that is not explicit by using background knowledge
d. From described events, ideas, infer links and connections between event deduce cause and effect, detects such relation as main idea, new information, generalization and exemplification
e. Distinguish between literal meaning and implied meaning
f. Detect culturally specific references and interpret them in a context of the appropriate cultural schemata
g. Develop and use a battery of reading strategies such as scanning
h. S-Run detecting is discourse makers, guessing the meaning of words from the context, activating schemata for interpretation of the text.[26]

The writers conclude that in reading evaluation have two skills; macro skill and micro skills. It is means that every skill has the different evaluation.

[25] H. Douglas brown, *Op. Cit*, p. 190
[26] *Ibid*, p. 190.

Table 1
Indicators of Reading Assessment[27]

No.	Indicators of Reading Assessment
1	Able to identify topic of text
2	Able to identify main idea of text
3	Able to identify specific information of the text
4	Able to identify characteristics of people or thing from the text
5	Able to identify the meaning of underlining word

6. News Item Text

a. Definition of News Item Text

Based on Oxford English Dictionary, news item is a text which informs reader about new or fresh events of the day.[28] The event mean an event that thought as an important news and proper known by public, so not all of events can informed to public. These events are included criminal events, politics, social, sport, health, culture, and natural phenomena. News item text can bring someone becomes a famous and professional journalist. Because a journalist has a task to search the trending topics and actual events.

[27]J. Michael O, Malley and Lorraine valdez Pierce, *Authentic Assesment for English Language Leraners* , (United States of America: Addison Wesley Publishing Company, 1996), p. 98.
[28] AS. Hornby,*Op. Cit,* p. 781.

States to Pardiyono, news item text is the interesting events and proper that informed to other and publicized in newspaper.[29] It means, the events must be a newsworthy events, interesting, and trending topic in society. News events and much of people talk about it will be prepared in a text, namely is news item text. Usually this text will be found in newspaper. News event will be much informed if it becomes trending topic in society, but if event has stale, it will not find in newspaper or lost from media social, like in newspapers and magazines.

States to Sri, news item text is a text that tells about a report or a recent event to be known by the public.[30] It is usually gives the information to reader about what happened, who were in the event, when it happened, where it happened, and how it happened in the recent time. Basically, the text consist of 5 W+1 H questions (who, what, where, when, and how).

Based on above explanations, news item text is a kind of genre that consists of newsworthy events, familiar events, and top events are need known by public. The text purposed to give more information to reader, listener or society about events that happened in the world. By means, the events have a reasonable to inform to public.

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[29] Pardiyono, *Pasti Bisa!! Teaching Genre Based-Writing*, (Yogyakarta: CV: Andi Offset, 2007), p. 245.

[30] Sri Dwi Astuti, *Comparing and Contrasting Recount and News Item Text*, (Bekasi: Adhi Aksara Abadi Indonesia, 2010), p. 5.

Moreover, there are some characteristics of news item text, such as: using declarative sentences, using simple past tense, using reported speech, and using formal language.[31] It means, writer makes the text by using grammar and structure in English, and using indirect speech refers to a sentence reporting what someone has said.

b. Generic Structures of News Item Text

News item text has generic structures, so reader is interesting to read it, they are:

a. Newsworthy events: recount the event of summary from.

   Newsworthy event is placed in the first paragraph. Newsworthy was content of content. The sentences in newsworthy event were often in Present Perfect form and ended by past sentences form.

b. Background event: elaborated what happened, to whom, in what circumstance. Background event contain the truth detail event.

c. Sources: one, such as a person or document that supplied information of the event.

d. Example of News Item

A Crane Befell Masjidil Haram, Mecca

Arab Saudi, Mekah- there was an accident that happened in Masjidil Haram, Mecca, a crane befell Masjidil Haram and made this place was shattered and disorder. *(Friday, September, 11th 2015)*

[31] *Ibid.,* p. 8.

This event happened when the members of haji was praying, suddenly there was something that fell and made them worried and got out of Masjidil Haram early and made the disturbance in this place.

Actually there was a crane befell Masjidil Haram and most of the members of haji became the victim, especially they were praying at third floor at Masjidil Haram.

"from this event, most of the members of haji became the victim, there were 107 persons were killed and 238 persons were injured", said the principal of haji health of Indonesian.

According to witness, this event that happened because wind was speedy (blow) and strong rain about at 05.30 p.m o'clock in that place. Because of that made a crane befell this place.

The victims that killed came from Indonesian and other state. In fact, there were four of Indonesian people that killed, they were Masnauli Hasibuan, Iti Rasti, Painem Dalio Abdullah, and Baharuddin Abdullah. They killed by conflict in their head.

"There were four of Indonesian people that killed, and they killed because there was conflict in their head", said Fidiansyah.

D. Review of Related Finding

There was some researcher that related to this research:

1. The Effect of Using Probable Passage Strategy in Teaching Reading a recount Text toward Students' Reading Comprehension at SMA N 2

Payakumbuh, 2015 a thesis by Rahmi Fadilah. She is concluded that there was significant effect of using Probable Passage Strategy in teaching recount text toward students' reading comprehension. The mean score of pre-test in experimental class was 64.78 and the mean score of post-test was 80.58. Then, the mean score of pre-test in control class was 49.51 and the mean score of post-test was 57.57. The result of T-test was higher than T-table (5.64 > 1.994). [32]

2. The Influence of Probable Passage Strategy on Reading Comprehension of the Second Year Students of State Junior high School 23 Pekanbaru a thesis by Dian Mujarokhim. He is concluded that there was significant effect of using Probable Passage Strategy on students' reading comprehension. The mean score of pre-test in experimental class was 45.80 and the mean score of post-test was 66.90. Then, the mean score of pre-test in control class was 50.50 and the mean score of post-test was 52.50. The result of T-test was higher than T-table (5.99 > 2.64).[33]
3. Improving Students' Reading Comprehension Using Probable Passage Strategy to The Eight-Grade Students of Junior High School Kemuja, 2016 a thesis by Uswatun Hasanah. She is Ccncluded that there was significant effect of

[32]Rahmi Fadilah, *The Effect of Using Probable Passage Strategy in Teaching Reading a recount Text toward Students' Reading Comprehension at SMA N 2 Payakumbuh*, Unpublished Thesis, (English Department Faculty of Languages and Arts State University of Padang, 2015).

[33]Dian Mujarokhim, *The Influence of Probable Passage Strategy on Reading Comprehension of the Second Year Students of State Junior high School 23 Pekanbaru*, Unpublished Thesis, (Department of English Education Faculty of Education and Teacher Training State Islamic University Sultan Syarif Kasim Riau Pekanbaru, 2012)

using Probable Passage Strategy on students' reading comprehension. The mean score of pre-test in experimental class was 41.00 and the mean score of post-test was 68.71. Then, the mean score of pre-test in control class was 48.91 and the mean score of post-test was 57.11. The result of T-test was higher than T-table (24.4 > 8.40).[34]

Based on above explanation, the researcher concludes that the method can increase students' reading comprehension. In this case, the researcher will do a research by using Probable Passage Strategy to increase students' reading comprehension. The researcher hopes this research can complete and contribute the previous findings. The researcher conducted the research through the title The Effect of Probable Passage Strategy on Students' Reading Comprehension at Grade X SMA Negeri 1 Panyabungan Selatan.

E. Conceptual Framework

Reading is important skill for students. The successful of reading comprehension depend on many factors. One of them is how the teacher teaching reading to the students. Reading comprehension is mental process in which the readers try to understand the meaning in a text.

[34]Uswatun Hasanah, *Improving Students' Reading Comprehension Using Probable Passage Strategy to The Eight-Grade Students of Junior High School Kemuja*, Unpublished Thesis, (Tarbiyah Department English Language Education Study Program State Collage of Islamic Studies Syaikh Abdurrahman Siddik Bangka Belitung, 2016).

Therefore, teacher must use a strategy when in teaching reading to students, when the teacher know that the students is low in reading comprehension, where the strategy can increase the students ability in reading comprehension, so that the students become understand the book that students read. in teaching reading comprehension, teacher can apply probable passage strategy. The effect of probable passage strategy on reading comprehension can see as picture below:

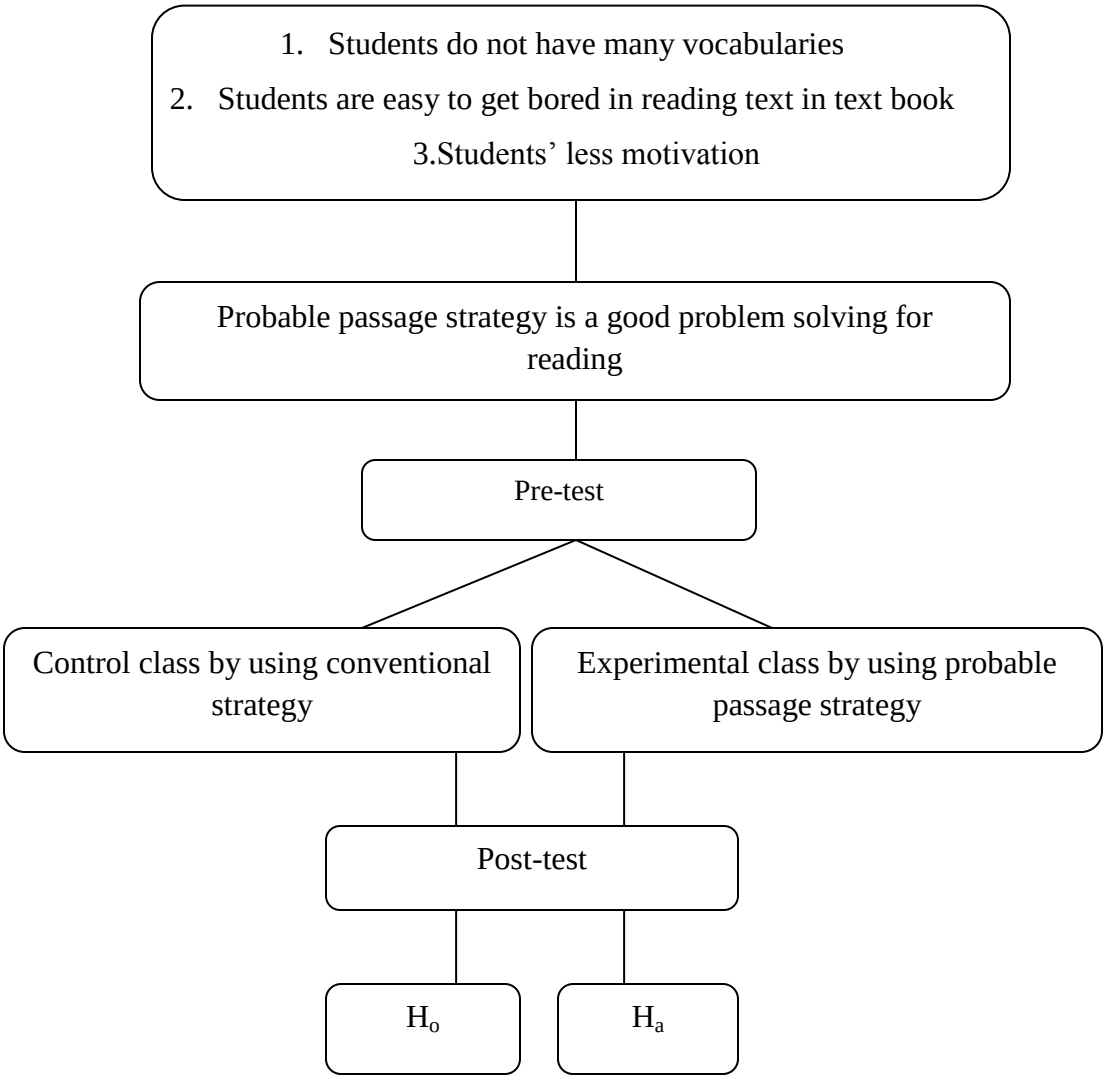

Figure 1: Conceptual Framework

F. Hypothesis

Hypothesis is the primary assumption or provisional result of the research. In this research, writer made the hypothesis: There is significant effect of probable passage strategy on students' reading comprehension at grade X SMA Negeri 1 Panyabungan Selatan : T count > T table

CHAPTER III

RESEARCH METHODOLOGY

A. Research Methodology

1. Place and Time of the Research

This research will be done at the tenth grade of SMA Negeri 1 Panyabungan Selatan started from November 28th,2016 until November 2nd , 2017. This school is located at Willem Iskandar Street, Tanobato, Panyabungan Selatan. The headmaster in this school is Drs. Sukyar. There are four English teachers in this school, they were Evi Sari Kartika,S.Pd., Rahmat, S.Pd., and Siti Aisyah, S.Pd and Diah Lestari, S.Pd.

2. Research Design

The kind of this research is quantitative research with experimental method. Experimental research is the only type of research that can test hypotheses to establish cause-effect relationship.[1] It means, in experimental research, the researcher manipulates at least one independent variable, controls other relevant variables, and observes the effect on one or more dependent variables. Therefore, Suharsimi Arikunto adds that the research can be design as follow:[2]

[1]L.R. Gay and Peter Airasian, *Educational Research Competences for Analysis and Application*, (USA: Prentice Hall, 2000), p. 367.

[2] Suharsimi Arikunto, *Manajemen Penelitian*, (Jakarta: Rineka Cipta, 2007), p. 210.

Table 2
Research Design

Class	Pre-test	Treatment	Post-test
Experiment Class	√	√	√
Control Class	√	x	√

Relate to the above quotation, in this research the researcher teach reading news item text by using probable passage strategy. Furthermore, the researcher look how far the effect of probable passage to improve the reading news item text of the students.

3. Population and Sample

a. Population

Population is group of the people that research by researcher. Gay and Airasian stated that population is the group of interest to the researcher, the group to which she or he would like the results of the study to be generalizable. [3] It means, the population researched by researcher on students at SMA Negeri 1 Panyabungan Selatan in 2017/2018 academic year. The whole tenth grade of SMA Negeri 1 Panyabungan Selatan students consist of four class and total population are 64 students, it can be seen in the table below:

[3] L.R. Gay and Peter Airasian, *Op.Cit.*, p. 122.

Table 3
The Population at Grade X Students of SMA Negeri 1 Panyabungan Selatan 2017/2018 Academic Year

No.	Class	Male	Female	Total
1	X MIA-1	9	13	22
2	X MIA-2	7	15	21
3	X IIS-1	9	12	21
Total				64

b. Sample

Sample is two or more classes that represent the population to be given the treatment or test. States to Gay and Airasian, sample comprises the individuals, items or events selected from large group referred to as a population.[4]

In this research, the researcher chose two classes as a sample. They are divided into experiment class and control class. The researcher use random sampling to take the sample.[5] Before choose the sample, the researcher interview the English teacher to know the classes that have the similar ability in English. After that, the researcher used normality and homogeneity test.

[4]L.R Gay and Airasian, *Op. Cit*, p. 121.
[5]Bambang Prasetyo and Lina Miftahul Jannah, *Metode Penelitian Kuantitatif*, Jakarta: PT Raja Grafindo Persada, 2005, p. 122.

1. Normality test

   Normality test is a test to find out whether the data of the research is normal or not. Researcher used normality test by using Chi Quadrate formula, as below:

$$x^2 = \Sigma \frac{(f_0 - f_h)^2}{f_h}$$

Where:

x^2 = chi- Quadrate

f_0 = frequency is gotten from the sample/ result of observation

f_h = frequency is hoped from population.[6]

To calculate the result of Chi-Quadrate, it is used significant level 5% (0.05) and degree of freedom as big as total of frequency is lessened 4 (dk = k-4). If result $x^2_{count} < x^2_{table}$. So, it can be concluded that data is distributed normal.

2. Homogeneity test

Homogeneity test is used to know whether control class and experimental class have the same variant or not. If both of classes are

[6]Suharsimi Arikunto, *Op. Cit.*, p. 313.

same, it is can be called homogeneous. The formula to prove homogeneous as below:[7]

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

Hypothesis is accepted if $F_{(count)} \leq F_{(table)}$

Hypothesis is rejected if $F_{(count)} \geq F_{(table)}$

Hypothesis is rejected if $\leq F\frac{1}{2}\alpha\ (n_1 - 1)\ (1 = n_2 - 1)$, while, if $F_{(count)} > F_{(table)}$ hypothesis is accepted. It is determined with significant level 5% (0.05) and dk numerator was $(n_1 - 1)$, while dk determinators is $(n_2 - 1)$. In this research, researcher selected sample as table 4 below:

Table 4
The sample at students X Grade of SMA Negeri 1 Panyabungan Selatan in 2016/2017 Academic Year

No.	Class	Numbers
1.	X MIA-1 : Control class	22
2.	X MIA-2 : Experimental class	21
Total		**43**

[7] Sugiyono, *Statistika untuk Penelitian*, (Bandung: Alfabeta, 2013), p. 140.

3. Instrument of Collecting Data

Instrument is a tool that can be used by the researcher to collect the valid and reliable data. In this research, the researcher used a test. States to Margono, test is a stimulant that given to someone by means to get answer that can be a foundation to determine a score or numeral.[8] In this research, researcher will use multiple choose.

There are some indicators that are using by researcher to measure students' reading comprehension in news item text. It can see from the table below:

Table 5
Indicators of Reading News Item in Pre-Test

No.	Indicators	Number of Items	Items	Score of Item	Total Score
1	Able to identify topic of text	1, 11	2	5	10
2	Able to identify main idea of text	2, 12	2	5	10
3	Able to identify specific information of the text	3, 4, 5, 6, 13, 14, 15, 20	8	5	40
4	Able to identify the meaning of underlining word	7, 8, 9, 10, 16, 17, 18, 19,	8	5	40
TOTAL			**20**	**-**	**100**

[8]Margono, *Op.Cit.*, p. 170.

Table 6
Indicators of Reading News Item in Post-Test

No.	Indicators	Number of Items	Items	Score of Item	Total Score
1	Able to identify topic of text	1, 12	2	5	10
2	Able to identify main idea of text	2, 13	2	5	10
3	Able to identify specific information of the text	3, 4, 5, 6, 7, 14, 15, 16, 17, 18,	10	5	50
4	Able to identify characteristics of people or thing from the text	8		5	5
5	Able to identify the meaning of underlining word	9, 10, 11, 19, 20	5	5	25
TOTAL			**20**	**-**	**100**

4. Validity and Reliability Instrument

a. Validity

Gay and Airasian states that validity is the most important characteristic a test or measuring instrument can possess.[9] In this research, the researcher uses content validity and item validity to find out the validity instrument.

Content validity is as any attempt to show that the content of the test represents the content or the domain being tested.[10] It is mean that content validity is the test should measure what the students have learned. The test was firstly validated by referring to the syllabus as teaching material that is supposed to learn by the

[9]L.R Gay Airasian, *Op. Cit*. p. 161.
[10]Fulcher, Glenn and Davidson, Fred, *Language Testing and Assessment; an advance resource book*, (New York, USA: Routledge, 2007), p. 6.

students. It is necessary to make sure that the content of curricular aim is appropriate reflected in the test. To get the validity of the each question had used to list *r* biserial with r_t *in 5% significant*: 0, 444 and 1% significant: 0, 561. So, if $r_{count} > r_{table}$ the test is classified valid.

Item validity is the extent to which an individual item measures what it purports to measure. [11] To get the validity of the test, the formula of *r pointbiserial* can be used as follow:

$$R_{pbi} = \frac{M_p - M_t}{SD_t} \quad \frac{\bar{p}}{q}$$

Where:

r_{pbi} : coefficient item validity

M_p : mean score

M_t : mean score of the total score

SD_t : Standard Deviation of the total score

p :Presentation of the right answer of the item tested validity

q : Presentation of the wrong answer of the item tested validity.[12]

The tests consist of 50 questions of multiple choice questions. It is divided into two groups; 25 for pre-test and 25 for post-test. Result of pre-test is 20 items are valid. Result of post-test is 20 items are valid.

[11] www.Whasington.edu accessed at Friday, November 17th, 2017 on 14:12 pm

[12] Anas Sudijono, *Pengantar Statistik Pendidikan*, (Jakarta: Raja Grafindo Persada, 2008), p. 258.

b. Reliability

Reliability is the degree of accuracy or precision in the measurements made by a research instrument.[13] An instrument of the research must be reliable. A reliable test is consistent and dependable.[14] Reliability of an instrument can be found by using K-R 20 formula.[15] The formula is as follow:

$$R_{11} = \frac{n}{n-1} \quad \frac{S_t^2 - \sum pq}{S_t^2}$$

Where:

R_{11} : Reliability of the Instrument

N : Total of Question

St^2 : Variants Total

p : Proporsi Subject who is right Answer(1)

N

q : Proporsi Subject who is Wrong Answer (0)

N

Reliability is a good character of the test that refers to the consistency of the measurement. The test is reliable if $r_{count} > r_{table}$ by using formulation KR-20. Result of pre-test is 1.01 ($r_{11} > 0.07$= reliable). Result of post-test is 0.99 ($r_{11} > 0.07$= reliable).

[13]L.R. Gay and Peter Airasian, *Op.Cit*, p. 181.

[14]H. Douglas Brown, *Language Assessment, principles and classroom practices*, San Fransisco State University: Longman, 2004, p. 20.

[15]Suharsimi Arikunto, *Prosedur Penelitian*, Jakarta: Rineka Cipta, 1998, p. 182.

5. Technique of Collecting Data

In this research, researcher done pre-test, treatment, and post-test for collecting data from the sample.

a. Pre-test, in this condition, researcher will give the test to sample for knowing their ability in reading news item text by using conventional strategy. Pre-test will give to experimental class and control class.

b. Post-test, researcher will give the test to sample about reading news item text by using probable passage strategy in experimental class and using explanation strategy in control class.

6. Technique of Analyzing Data

The techniques of analyzing data that was used by the researcher were:

1. Scoring Technique

To know the score, the researcher use the steps were:

a. Total maximal score is 100

b. True answer would be given 4 score and false answer not give the score. Total score 5 x 20 = 100

Maximal score = $\frac{total\ of\ true\ answer}{total\ of\ test}$

2. Requirement test

a. Normality test

To know the normality, the researcher use *Chi-Quadrate* formula.

The formula is as follow:

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

Where:

x^2 = Chi-Quadrate

f_o = Frequency is gotten from the sample/result of observation (questioner).

f_h = Frequency is gotten from the sample as image from frequency is hoped from the population.

b. Homogeneity Test

To find the homogeneity, the researcher use *Harley test*. The formula is as follow:

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

Hypotheses is accepted if $F_{(count)} \leq F_{(table)}$

Hypotheses is rejected if $F_{(count)} \geq F_{(table)}$

Hypothesis is rejected if $F \leq F\frac{1}{2}\ a(n_1\text{-}1)$ (1= n_2-1), while if $F_{count} > F_{table}$ hypothesis is accepted. It determined with significant level

5% (0.05) and dk numerator was (n_1-1), while dk detominators is (n_2-1).

c. Hypothesis test

1) There was the significant effect of probable passage on students' reading news item text comprehension at the X grade of SMAN 1 Panyabungan Selatan.

Ha : $T_{count} > T_{table}$

From the above explanation, to test hypothesis researcher used formula as follow:[16]

$$Tt = \frac{X_1 - X_2}{\frac{n_1 - 1\ s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}\ \frac{1}{n_1} + \frac{1}{n_2}}$$

Where,

t : the value which the statistical significance

X_1 : the average score of the experimental class

X_2 : the average score of the control class

s_1^2 : deviation of the experimental class

s_2^2 : deviation of the control class

n_1 : number of experimental

n_2 : number of control class

[16] *Ibid.*, p. 135.

CHAPTER IV

DATA ANALYSIS

As mentioned is earlier chapter, in order to evaluate the effect of using probable passage on students' reading comprehension, the researcher has calculated the data using pre-test and post-test. The researcher used the formulation of T-test to test the hypothesis. Next, the researcher described the data as follow:

A. Description of Data

1. Description of Data before Using Probable Passage Strategy

a. Score of Pre-test Experimental Class

In pre-test of experimental class, the researcher calculated the result that had been gotten by the students in answering the question (test). The score of pre-test experimental class can be seen in the following table:

Table 7
The Score of Experimental Class in Pre-test

Total	1275
Highest score	75
Lowest score	35
Mean	61.36
Median	64.78
Modus	61
Range	45
Interval	9
Standard deviation	10,89
Variants	123.21

Based on the above table the total score of experiment class in pre-test was 1275, mean was 61.36, standard deviation was 10.89, variants was 123.21, median was 64.78, range was 45, modus was 61, interval was 9. The researcher got the highest score was 75 and the lowest score was 35. It can be seen on appendix 19. Then, the computed of the frequency distribution of the students' score of experiment class can be applied into table frequency distribution as follow:

Table 8
Frequency Distribution of Students' Score

No	Interval	Mid Point	Frequency	Percentages
1	30 – 38	35	1	4.77%
2	39 – 47	43	2	9.53%
3	48 – 56	52	4	19.04%
4	57 – 65	**61**	7	33.33%
5	66 – 74	70	4	19.04%
6	75 – 83	79	3	14.29%
$i = 9$			21	100%

From the table above, the students' score in class interval between 30-38 was 1 students (4.77%), class interval between 39-47 was 2 students (9.53%), class interval between 48-56 was 4 students (19.04%), class interval between 57-65 was 7 students (33.33%), class interval between 66-74 was 4 students (19.04%), and class interval between 75-83 was 3 students (14.29%).

In order to get description of the data clearly and completely, the researcher presents them in histogram on the following figure:

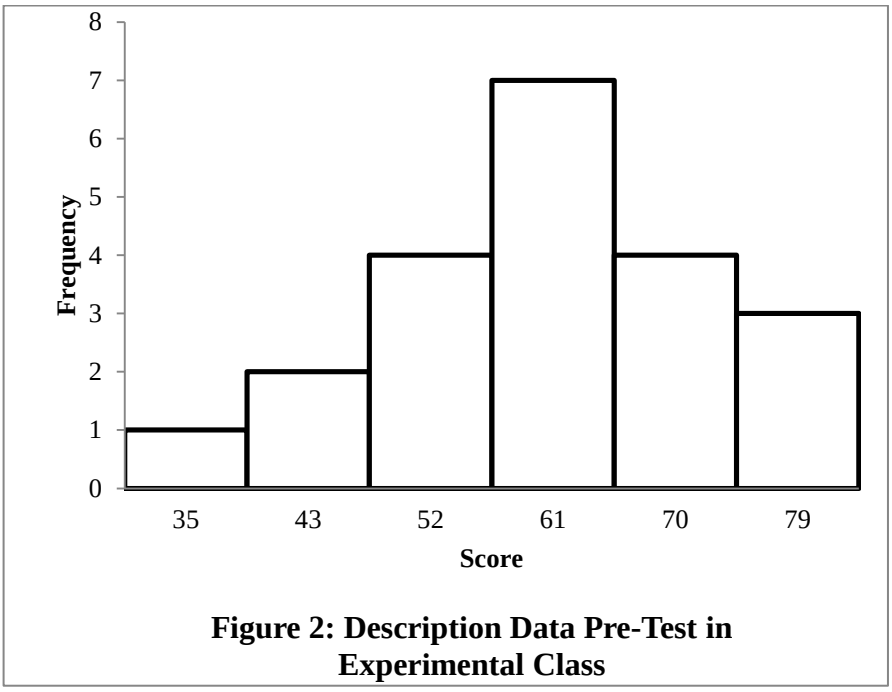

Figure 2: Description Data Pre-Test in Experimental Class

From the histogram above, the students' score 35 was 1 student, the students' score 43 was 2 students, the students' score 52 was 4 students, the students' score 61 was 7 students, the students' score 70 was 4 students, and the students' score 79 was 3 students.

b. Score of Pre-Test Control Class

In pre-test of control class, the researcher calculated the result that had been gotten by the students in answering the question (test). The score of pre-test control class can be seen in the following table:

Table 9
The Score of Control Class in Pre-test

Total	1320
Highest score	70
Lowest score	40
Mean	63.66
Median	63.5
Modus	60.5
Range	30
Interval	6
Standard deviation	8.4
Variants	274.76

Based on the above table the total score of experiment class in pre-test was 1320, mean was 63.66, standard deviation was 8.4, variants was 274.76, median was 63.5, range was 30, modus was 60.5, interval was 6. The researcher got the highest score was 70 and the lowest score was 40. It can be seen on appendix 19. Then, the computed of the frequency distribution of the students' score of control class can be applied into table frequency distribution as follow:

Table 10
Frequency Distribution of Students' Score

No	Interval	Mid Point	Frequency	Percentages
1	40 – 45	43.5	2	9.1%
2	46 – 51	49.5	3	13.63%
3	52 – 57	55.5	4	18.18%
4	58 – 63	**61.5**	7	31.81%
5	64 – 69	67.5	4	18.18%
6	70 – 75	73.5	2	9.1%
$i = 9$			22	100%

From the table above, the students' score in class interval between 40 – 45 was 2 students (9.1%), class interval between 46 – 51 was 3 students (13.63%), class interval between 52 – 57 was 4 students (18.18 %), class interval between 58 – 63 was 7 students (31.81%), class interval between 64 – 69 was 4 students (18.18%), and class interval between 70 – 75 was 2 students (9.1%).

In order to get description of the data clearly and completely, the researcher presents them in histogram on the following figure:

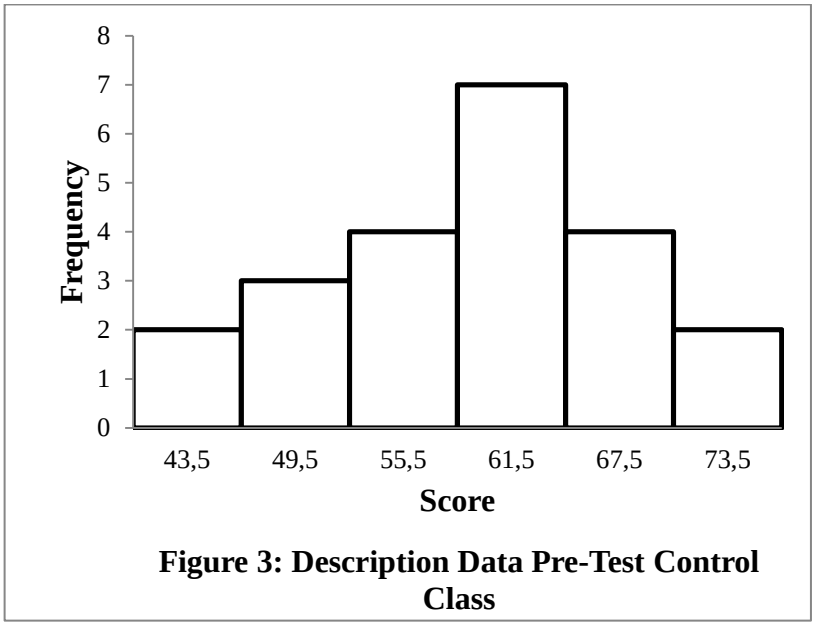

Figure 3: Description Data Pre-Test Control Class

From the histogram above, the students' score 43.5 was 2 students, the students' score 49.5 was 3 students, the students' score 55.5 was 4 students, the students' score 61.5 was 8 students, the students' score 67.5 was 4 students, and the students' score 73.5 was 2 students.

2. Description of Data After Using Probable Passage Strategy

a. Score of Post-Test Experimental Class

In post-test of experimental class, the researcher calculated the result that had been gotten by the students in answering the question (test) after the researcher did the treatment by using probable passage. The score of post-test experimental class can be seen in the following table:

Table 11
The Score of Experimental Class in Post-test

Total	1640
Highest score	90
Lowest score	65
Mean	79.74
Median	80.58
Modus	79.8
Range	30
Interval	6
Standard deviation	6.06
Variants	38.69

Based on the above table the total score of experiment class in post-test was 1640, mean was 79.74, standard deviation was 6.06, variants was 38.69, median was 80.58, range was 30, modus was 79.8, interval was 6. The researcher got the highest score was 90 and the lowest score was 65. It can be seen on appendix 20. Then, the computed of the frequency distribution of the students' score of experiment class can be applied into table frequency distribution as follow:

Table 12
Frequency Distribution of Students' Score

No	Interval	Mid Point	Frequency	Percentages
1	65 – 70	67.5	2	9.52%
2	71 – 76	73.5	5	23.81%
3	77 – 82	**79.5**	8	38.1%
4	83 – 88	85.5	4	19.04%
5	89 – 94	91.5	2	9.52%
i =6			21	100%

From the table above, the students' score in class interval between 65 – 70 was 2 students (9.52%), class interval between 71 – 76 was 5 students (23.81%), class interval between 77 – 82 was 8 students (38.1%), class interval between 83 – 88 was 4 students (19.04%), class interval between 89 – 94 was 2 students (9.52%).

In order to get description of the data clearly and completely, the researcher presents them in histogram on the following figure:

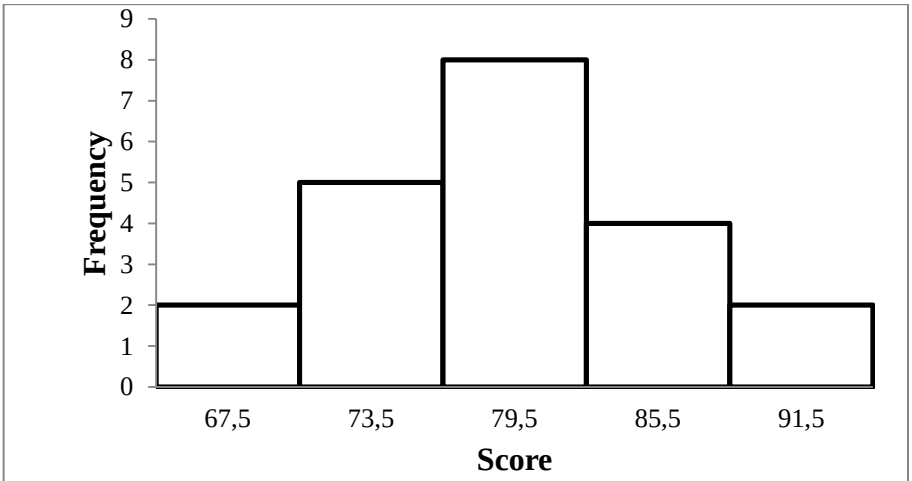

Figure 4: Description Data Post-Test of Experimental Class

From the histogram above, the students' score 67.5 was 2 students, the students' score 73.5 was 5 students, the students' score 79.5 was 8 students, the students' score 85.5 was 4 students, and the students' score 91.5 was 2 students.

b. Score of Post-Test Control Class

In post-test of control class, the researcher calculated the result that had been gotten by the students in answering the question (test) after the researcher taught the reading descriptive text by using conventional strategy. The score of post-test control class can be seen in the following table:

Table 13
The Score of Control Class in Post-test

Total	**1320**
Highest score	80
Lowest score	50
Mean	73.2
Median	72.6
Modus	71.22
Range	30
Interval	6
Standard deviation	8.22
Variants	62.28

Based on the above table the total score of control class in post-test was 1320, mean was 73.2, standard deviation was 8.22, variants was 62.28, median was 72.6, range was 30, modus was 71.22, interval was 6. The researcher got the highest score was 80 and the lowest score was 50. It can be

seen on appendix 20. Then, the computed of the frequency distribution of the students' score of control class can be applied into table frequency distribution as follow:

Table 14
Frequency Distribution of Students' Score

No	Interval	Mid Point	Frequency	Percentages
1	50 – 55	52.5	2	9.1%
2	56 – 61	58.5	3	13.63%
3	62 – 67	64.5	5	22.72%
4	68 – 73	**70.5**	7	31.82%
5	74 – 79	76.5	3	13.63%
6	80 -85	83.5	2	9.1%
i = 6			22	100%

From the table above, the students' score in class interval between 50-55 was 2 students (9.1%), class interval between 56-61 was 3 students (13.63 %), class interval between 62-67 was 5 students (22.72 %), class interval between 68 – 73 was 7 students (31.82%), class interval between 74-79 was 3 students (13.63%), and the last class interval between 80 – 85 was 2 students (9.1%).

In order to get description of the data clearly and completely, the researcher presents them in histogram on the following figure:

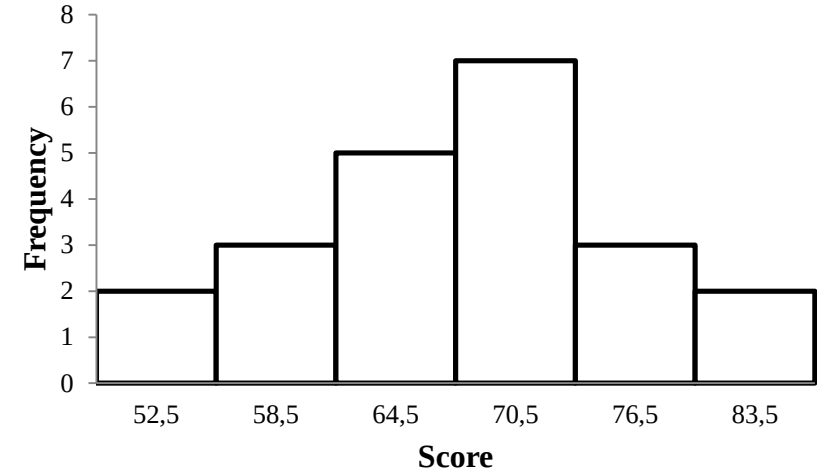

Figure 5: Description Data Post-Test of Control Class

From the histogram above, the students' score 52.5 was 2 students, the students' score 58.5 was 3 students, the students' score 64.5 was 7 students, the students' score 70.5 was 3 students, the students' score 76.5 was 2 students, and the students score 83.5 was 2 students.

3. Description of Comparison Mean score of Pre-Test and Post-Test

a. The Comparison between Description Data Pre-Test of Control Class and Experimental Class

Based on above histogram, researcher compared between description data pre-test of control class and description data of experimental class on the following figure:

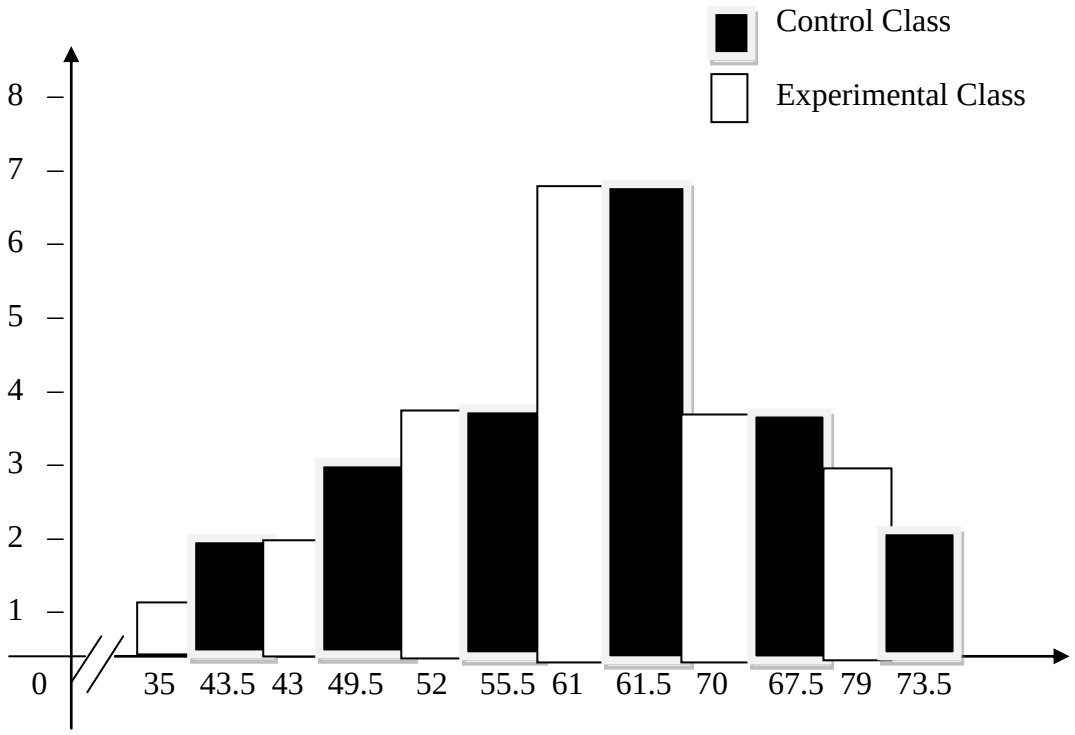

Figure 6: Description Data Pre-Test of Control Class and Experimental Class

From the chart above, the students' scores of experimental class was higher than the students' scores of control class before give the treatment.

b. The Comparison between Description Data Post-Test and Pre-Test of Experimental Class

Based on above diagram, researcher compared between description data pre-test and post test of experimental class on the following figure:

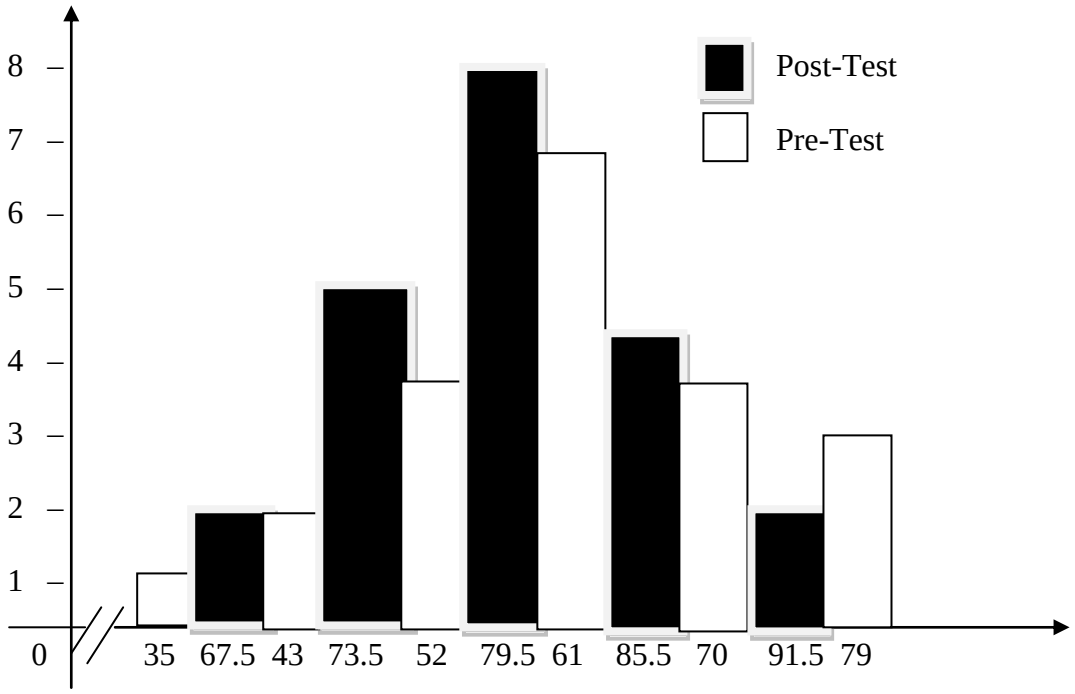

Figure 7: Description Data of Pre-Test and Post-Test of Experimental Class

From the chart above, the students' scores of post-test was higher than the students' scores of pre-test after give the treatment.

c. The Comparison between Description Data Pre-Test and Post-Test in Control Class

Based on above diagram, researcher compared between description data pre-test and post-test of control class and description data on the following figure:

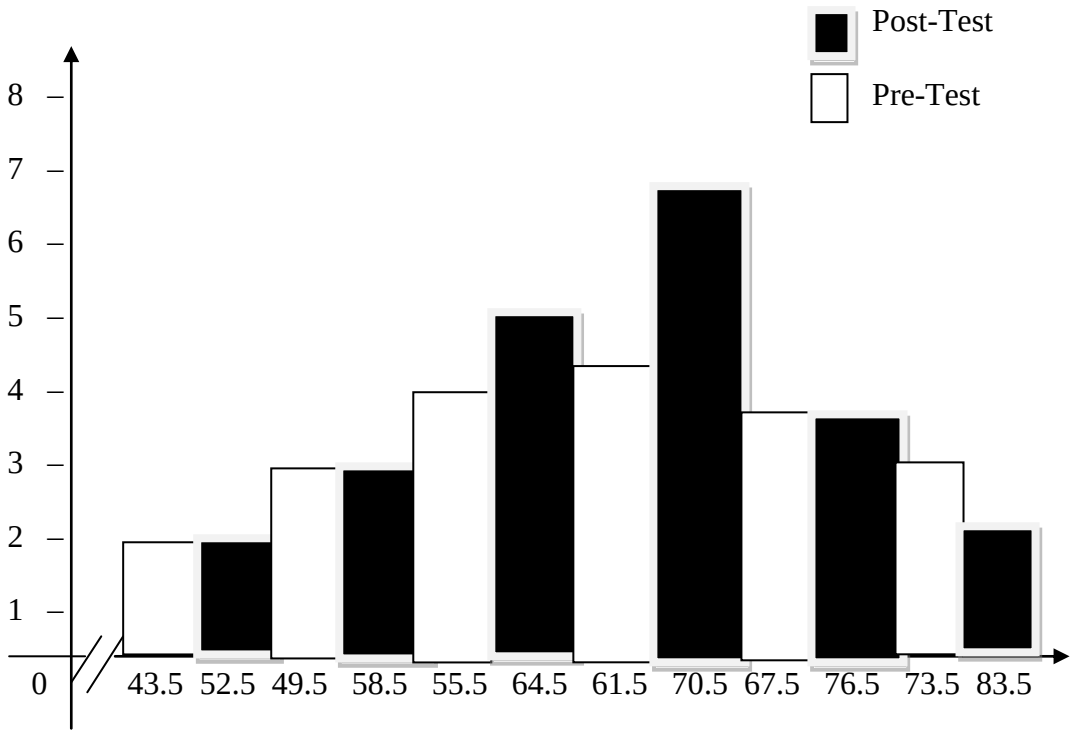

Figure 8: Description Data Pre-Test and Post-Test of Control Class

From the chart above, the students' scores of post-test was higher than the students' scores of pre-test after give the treatment.

d. The Comparison between Description Data Post-Test of Control Class and Experimental Class

Based on above diagram, researcher compared between description data pre-test of control class and description data of experimental class on the following figure:

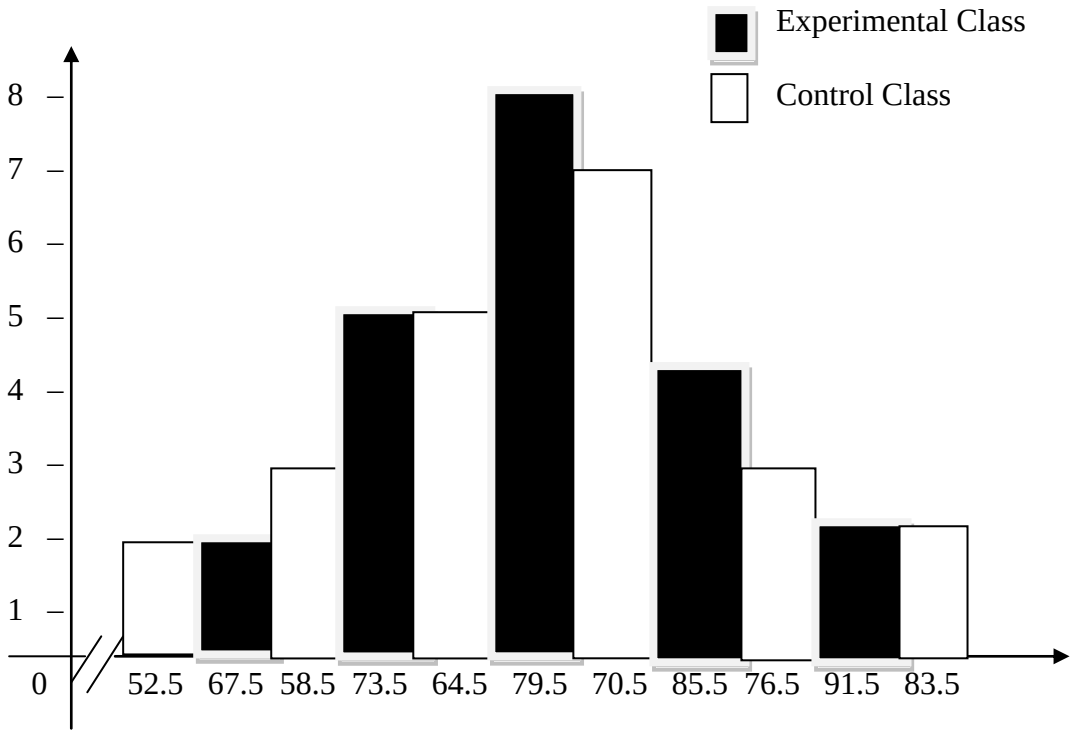

Figure 9: Description Data Post-Test of Experimental Class and Control Class

From the chart above, the students' scores of experimental class was higher than the students' scores of control class after give the treatment.

B. Technique of Data Analysis

1. Requirement Test

a. Normality and Homogeneity Pre-Test

1) Normality of Experimental and Control Class in Pre-Test

Table 15
Normality and Homogeneity in Pre-Test

Class	Normality Test		Homogeneity Test	
	x_{count}	x_{table}	f_{count}	f_{table}
Experiment Class	-2.89	11.070	-0.44 < 2.07	
Control Class	9.36	11.070		

Based on the above table researcher calculation, the score of experiment class Lo = -2.89 < Lt = 11.070 with n = 21 and control class Lo = 9.36 < Lt = 11.070 with n = 22, and level α 0.05. Cause Lo < Lt in the both class. Thus, H_a was accepted. It means that experiment class and control class were distributed normal. It can be seen in appendix 14.

2) Homogeneity of Experimental and Control Class in Pre-test

The coefficient of F_{count} = -0.44 was compared with F_{table}. Where F_{table} was determined at real α 0.05, and the different numerator dk = N-1 = 21-1 = 20 and denominator dk N-1 = 22–1 = 21. Thus, by using the list of critical value at F distribution is got $F_{\mathbf{0.05}}$ = 2.07. It showed that F_{count} -0.44 < F_{table} 2.07. Thus, the researcher concluded

that the variant from the data of the Students' Reading Comprehension at SMA Negeri 1 Panyabungan Selatan by experimental and control class was homogenous. The calculation can be seen on the appendix 12.

b. Normality and Homogeneity Post-Test

1) Normality of Experimental and Control Class in Post-Test

Table 16
Normality and Homogeneity in Post-Test

Class	Normality Test		Homogeneity Test	
	x_{count}	x_{table}	f_{count}	f_{table}
Experiment Class	-2.89	11.070	1.60 < 2.07	
Control Class	9.36	11.070		

Based on the table above researcher calculation, the score of experiment class Lo = -2.89 < Lt = 11.070 with n = 21 and control class Lo = 9.36 < Lt = 11.070 with n = 22, and level α 0.05. Cause Lo < Lt in the both class. Thus, H_a was accepted. It means that experiment class and control class were distributed normal. It can be seen in appendix 14.

2) Homogeneity of Experimental and Control Class in Post-test

The coefficient of F_{count} = 1.60 was compared with F_{table}. Where F_{table} was determined at real α 0.05, and the different numerator dk = N-1 = 21-1 = 20 and denominator dk N-1 = 22-1 = 21. Thus, by

using the list of critical value at F distribution is got $F_{0.05}$ = 2.07. It showed that F_{count} 1.60 < F_{table} 2.07. Thus, the researcher concluded that the variant from the data of the Students' Reading Comprehension at SMA Negeri 1 Panyabungan Selatan by experimental and control class was homogenous. The calculation can be seen on the appendix 12.

2. Hypothesis Test

After calculated the data of post-test, researcher has found that post-test result of experiment and control class is normal and homogenous. Based on the result, researcher used parametric test by using T-test to analyze the hypothesis. Hypothesis alternative (H_a) of the research was "There was the significant effect of Probable Passage on Students' Reading Comprehension". The calculation can be seen on the appendix 21.

Table 17

Result of T-test from the Both Averages

Pre-test		**Post-test**	
t_{count}	t_{table}	t_{count}	t_{table}
-2.61	1.6828	8.175	1.6828

$H_a : \mu_1 > \mu_2$

Where:

$H_a : \mu_1 > \mu_2$ "There was significant effect of probable passage on students' reading comprehension".

Based on researcher calculation, researcher found that t_{count} -2.61 while t_{table} 1.628 with opportunity $(1 - \alpha) = 1 - 5\% = 95\%$ and $dk = n_1 + n_2 - 2 = 21 + 22 - 2 = 41$. Cause $t_{count} > t_{table}$ (8.175 > 1.628), it means that hypothesis H_a was accepted and H_0 was rejected. Thus, there was the significant effect of probable passage on students' reading comprehension. In this case, the mean score of experimental class by using probable passage was 80.58 and mean score of control class was 72.6 by using conventional strategy. The calculation can be seen on the appendix 14.

C. Discussion

Based on the related findings, the researcher discussed the result of this research and compared with the related findings. It also discussed with the theory that has been stated by the researcher. First, Uswatun Hasanah[1] showed that the experimental group got 41.00 for the mean score of pre-test. Second, Rahmi Fadilah[2] showed that the experimental group got 52.22 for the mean score of pre-test. Third, Dian Mujarokhim[3] showed that the experimental group got 45.80.

[1]Uswatun Hasanah, *Improving Students' Reading Comprehension Using Probable Passage Strategy to The Eight-Grade Students of Junior High School Kemuja*, Unpublished Thesis, (Tarbiyah Department English Language Education Study Program State Collage of Islamic Studies Syaikh Abdurrahman Siddik Bangka Belitung, 2016).

[2]Rahmi Fadilah, *The Effect of Using Probable Passage Strategy in Teaching Reading a recount Text toward Students' Reading Comprehension at SMA N 2 Payakumbuh*, Unpublished Thesis, (English Department Faculty of Languages and Arts State University of Padang, 2015).

[3]Dian Mujarokhim, *The Influence of Probable Passage Strategy on Reading Comprehension of the Second Year Students of State Junior high School 23 Pekanbaru,* Unpublished Thesis, (Department of English Education Faculty of Education and Teacher Training State Islamic University Sultan Syarif Kasim Riau Pekanbaru, 2012).

Rahmi's pre-test result was higher than Dian's result. Rahmi's pre-test result was the highest.

Meanwhile, the researcher got the mean score of pre-test of the experimental group was 64.78 and it was the highest pre-test result than Uswatun's, Rahmi's and Dian's result of the related findings. From the above description, it can be seen that the highest mean score of pre-test of the experimental group was gotten by the researcher where the mean score of pre-test was 64.78 and the highest mean score of pre-test of the experimental group was gotten by Rahmi in her thesis where the mean score of pre-test was 52.22 and the lowest mean score of pre-test of the experimental group was gotten by Uswatun Hasanah in her thesis where the mean score of pre-test was 41.00 It means, before using Probable Passage, students' score was low and for the researcher, the mean score of pre-test of the experimental group was under the standardization where the standardization mark is 75.

Then, for the post-test result, Uswatun[4] got the experimental class' score was 68.71. Rahmi[5] got the experimental class' score was 69.01, Dian[6] got the experimental class' score was 66.90 and it was lower than Rahmi's and Uswatun result. Beside, the researcher got the mean score for experimental class after

[4]Uswatun Hasanah, *Op.Cit*. p. 65.
[5]Rahmi Fadilah, *Op.Cit.* p. 72.
[6]Dian Mujarokhim, *Op.Cit.*p. 57.

using probable passage strategy was 80.58 and it was the highest score among the related findings.

From the description, it can be seen that the highest mean score of post-test of the experimental group was gotten by the researcher where the mean score of post-test was 80.58 and the highest mean score of post-test was gotten by Rahmi in her thesis where the mean score of post-test was 69.01. Thus, among the mean scores of post-test, the mean scores have increased than pre-test. Where, for the researcher result, the mean score of post-test was passed the standardization where the standardization mark is 75.

Based on the result, the researcher has got the significant effect of using Probable Passage, Thus have the researchers who mentioned in related findings. Uswatun[7] found that t_0 was higher than t_t (24.4 > 8.40), Dian[8] found that t_0 was higher than t_t (5.99 > 2.64), Rahmi[9] found that t_0 was higher than t_t (5.64 > 1.994). From the description, T-test result from Uswatun was the highest among the related findings and T-test result from Rahmi was the lowest among them.

Beside, the researcher also found that t_0 is higher than t_t where t_0 was 8.175 and t_t was 1.6828 (8.175 > 1.6828). Where, the researcher result of t-test was the higher between Rahmi and Dian, and was the lower than Uswatun among the related findings result. Thus, the result of t-test of Probable Passage high than the result t-test of related findings. It can be seen that among the

[7]Uswatun Hasanah,*Op.Cit*. p. 68.
[8]Dian Mujarokhim,*Op.Cit*. p. 78.
[9]Rahmi Fadilah, *Op.Cit.* p. 62.

researches, the using of probable passage strategy gave the effect to students' reading comprehension especially at grade X SMA Negeri 1 Panyabungan Selatan where it is suitable with the theory from June Preszler states that, probable passage strategy is an instructional strategy to teach reading trough prediction, discussion, and writing that can help student to make prediction, access background knowledge, see relationship between ideas, make inferences, and from picture about what might occur in a reading.[10]

Besides that, the students could active in their class, so that students easy in remembering what students were learned. This proofs show that Probable Passage is suitable to be applied in teaching reading comprehension because it has been proven by the previous researches and the theory. Thus, Probable Passage has given the significant effect to the research that has been done by the researcher or the other researcher who mentioned in related finding.

From the result of the research that is previously stated, it was proved that the students of the experimental group who were taught reading comprehension by using Probable Passage got better result than the control group that were taught reading comprehension by using conventional method.

[10]June Preszler,*Op.Cit,* p 6.

D. Threats of the Research

The researcher found the threats of the research as follows:

1. The students were not serious in answering the pre-test and post-test. Some of them still did cheating. It made the answer of the test was not pure because they did not do it by themselves.
2. The students were noisy while the learning process. They were not concentrating in following the learning process. Some of them talked to their friends and some of them did something outside the teacher's rule. Of course it made them cannot get the teacher's explanation well and gave the impact to the post-test answer.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

The mean score of experimental class in post test was 80.58. meanwhile the mean score of control class in post-test was 72.6, it was higher than control class (80.58 >72.6). Based on the calculation of t_{count} was 8.175 was higher than t_{table} was 1.6828. It can be concluded that there was the significant effect of Probable Passage Strategy on Students' Reading Comprehension at Grade X SMA Negeri 1 Panyabungan Selatan where H_a was accepted and H_0 was rejected.

B. Suggestion

Based on the research done, it has been proven that the use of probable passage strategy gives positive effect on students' reading comprehension. However, there are several suggestions to English teacher and the next researcher, as follow:

1. It is expected that teachers can teach and help students to use probable passage strategy in reading in order to be strategic readers.
2. It is expected, the researcher hoped to use Probable Passage Strategy, because it can make them to be active in discuss the material.
3. It is expected to the next researchers who apply probable passage strategy not only for news item text but also to another text that suitable with probable passage's frame such as descriptive, recount and narrative text.

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CURRICULUM VITAE

A. Identity

Name	: **NIRMALA AINI**
Reg. No.	: 13 340 0020
Place/Birth	: Tanobato/December, 14th 1994
Sex	: Female
Religion	: Islam
Address	: Kelurahan Tanobato,
	Kec. Panyabungan Selatan
	Kab. Mandailing Natal

B. Parents

Father's Name	: Alm. Nirwan Lubis
Mother's Name	: Nur Syamsu Nasution

C. Educational Background

1. Elementary School	: SD Negeri 1 No. 142581 Tanobato	(2007)
2. Junior High School	: SMP Negeri 1 Panyabungan Selatan	(2010)
3. Senior High School	: SMA Negeri 1 Panyabungan	(2013)
4. Institute	: IAIN Padangsidimpuan	(2017)

Appendix 1

Experiment Class

RENCANA PELAKSANAAN PEMBELAJARAN

(RPP)

Nama sekolah **:** SMAN 1 Panyabungan Selatan

Kelas/ semester **:** X-1/ 2

Standar Kompetensi **:** 11. Memahami makna teks fungsional pendek dan esei sederhana berbentuk narrative, descriptive dan news item dalam konteks kehidupan sehari-hari dan untuk mengakses ilmu pengetahuan.

Kompetensi Dasar **:** 11.2 Merespon makna dan langkah-langkah retorika dalam esei sederhana secara akurat, lancar dan berterima dalam konteks kehidupan sehari-hari dan untuk mengakses ilmu pengetahuan dalam teks berbentuk narrative, descriptive, dan news item.

Jenis teks **:** *News item text*

Tema **:** *Twenty-one Killed in Road Accident*

Aspek/ skill **:** Membaca

Alokasi waktu **:** 4 x 45 menit (2 x pertemuan)

1. **Indikator**
   a. Memahami fungsi sosial dari teks news item
   b. Menguasai generic structure dari teks news item
   c. Menguasai fitur bahasa dari teks news item
   d. Mampu memahami teks news item
2. **Tujuan Pembelajaran**

   Pada akhir pembelajaran siswa dapat:
   a. Memahami fungsi sosial dari teks news item
   b. Menguasai generic structure dari teks news item
   c. Menguasai fitur bahasa dari teks news item
   d. Memahami teks news item.

2. **Metode Pembelajaran** : Probable Passage
3. **Materi Pembelajaran**
   a. Definition of news item text
   b. Generic structures of news item text
   c. Language features of news item text
   d. Examples
4. **Langkah-langkah Kegiatan**

   Pertemuan pertama dan kedua

   a. Kegiatan pendahuluan
      1) Guru mengucapkan salam, berdoa, dan mengabsen siswa
      2) Guru memberikan motivasi atau penguatan kepada siswa sebelum memulai proses belajar mengajar
      3) Guru memberikan pengantar mengenai materi yang akan dipelajari.

b. Kegiatan inti

1) Memilih 10-15 kata kunci atau frasa. Kata-kata yang harus menggambarkan ide utama dan konsep yang akan diperkenalkan dalam membaca.
2) Menuliskan kategori untuk siswa dengan menyediakan nama-nama kategori tersebut,**(Problem, Cause, Solution, Setting, Character, Summary/Gist Statement, To Discover**). (jika memungkinkan, satu kelompok untuk **Unknown** untuk kata-kata yang tidak akrab dengan siswa).
3) Membagi kelas ke dalam kelompok kerjasama. Siswa diminta meletakkan kata kunci ke dalam kategori yang sudah disediakan.
4) Berdasarkan kata kunci dan kategori, siswa diminta menuliskan kesimpulan atau intisari yang menjelaskan apakah yang mereka fikirkan akan sama seperti yang mereka baca. (sebelumnya menentukan jika siswa membutuhkan untuk menggunakan semua kata kunci atau frasa kecuali dalam kelompok **Unknown**.
5) Bagian **To Discover** siswa diminta untuk merincikan apa yang mereka harapkan dalam pembelajaran atau menemukan yang berkaitan dengan topik dan hal yang tidak diketahui sesuai bacaan mereka.
6) Setelah siswa membaca materi dengan benar, kemudian mengisi kategori **Summary Statement** dan mendiskusikan konsep yang diharapkan siswa untuk menemukan atau belajar lebih dari itu. Siswa menuliskan tambahan beberapa konsep **Summary/Gist statement, Unknown Words,** dan **To Discover.**
7) Setelah siswa membaca materi dengan benar, siswa kembali ke kategori tambahan dan melihat kembali **Unknown Words**. Juga meminta siswa jika mereka perlu menyesuaikan kata-kata dalam kategori.
8) Siswa diminta menuliskan kesimpulan baru/pertanyataan baru sesudah membaca teks dengan benar.

c. Penutup

1) Guru menanyakan kesulitan-kesulitan yang dialami siswa ketika proses belajar mengajar sedang berlangsung

2) Guru menyimpulkan materi pembelajaran.

5. Sumber belajar

a. Buku English Alive for senior high school

b. Look Ahead for Senior High School 1

c. Learning to Use English

d. English dictionary

e. Dan sumber lain yang relevan

a. Indicator Penilaian

Teknik penilaian : tes tulisan

Bentuk Instrumen : pilihan ganda

Contoh soal : terlampir

Skor maksimal = 4 x 25= 100

Nilai maksimal = 100

Nilai siswa = Skor perolehan x 100
Skor maksimal

Padangsidimpuan, 2017

Validator

Sojuangon Rambe, S.S., MPd.

NIP. 19790815 200604 1 003

Appendix 2

Control Class

RENCANA PELAKSANAAN PEMBELAJARAN

(RPP)

Nama sekolah **:** SMAN 1 Panyabungan Selatan

Kelas/ semester **:** X-2/ 2

Standar Kompetensi **:** 11. Memahami makna teks fungsional pendek dan esei sederhana berbentuk narrative, descriptive dan news item dalam konteks kehidupan sehari-hari dan untuk mengakses ilmu pengetahuan.

Kompetensi Dasar **:** 11.2 Merespon makna dan langkah-langkah retorika dalam esei sederhana secara akurat, lancar dan berterima dalam konteks kehidupan sehari-hari dan untuk mengakses ilmu pengetahuan dalam teks berbentuk narrative, descriptive, dan news item.

Jenis teks **:** *News item text*

Tema **:** *Twenty-one Killed in Road Accident*

Aspek/ skill **:** Membaca

Alokasi waktu **:** 4 x 45 menit (2 x pertemuan)

3. **Indikator**
   e. Memahami fungsi sosial dari teks news item
   f. Menguasai generic structure dari teks news item
   g. Menguasai fitur bahasa dari teks news item

h. Mampu memahami teks news item

4. Tujuan Pembelajaran

Pada akhir pembelajaran siswa dapat:

e. Memahami fungsi sosial dari teks news item
f. Menguasai generic structure dari teks news item
g. Menguasai fitur bahasa dari teks news item
h. Menuliskan teks news item.

5. Materi Pembelajaran

e. Definition of news item text
f. Generic structures of news item text
g. Language features of news item text
h. Examples

6. Metode Pembelajaran : Conventional Strategy (Three Phases Technique)

7. Langkah-langkah Kegiatan

(Pertemuan Pertama)

d. Kegiatan pendahuluan

4) Guru mengucapkan salam, berdoa, dan mengabsen siswa
5) Guru memberikan motivasi atau penguatan kepada siswa sebelum memulai proses belajar mengajar
6) Guru memberikan pengantar mengenai materi yang akan dipelajari.

e. Kegiatan inti

9) Memperkenalkan teks news item kepada siswa
10) Membuat satu contoh teks news item
11) Bersama siswa menganalisa generic structure dari contoh teks news item yang dibuat
12) Bersama siswa menganalisa language feature atau bahasa-bahasa yang digunakan dalam teks news item tersebut

13) Menyuruh siswa mencari contoh teks news item dari berbagai sumber, seperti buku teks ataupun internet sekaligus menentukan generic structurenya

f. Penutup

3) Guru menanyakan kesulitan-kesulitan yang dialami siswa ketika proses belajar mengajar sedang berlangsung

4) Guru menyimpulkan materi pembelajaran.

(Pertemuan Kedua)

a. Kegiatan pendahuluan

1) Guru mengucapkan salam, berdoa, dan mengabsen siswa
2) Guru memberikan motivasi atau penguatan kepada siswa sebelum memulai proses belajar mengajar
3) Guru memberikan pengantar mengenai materi yang akan dipelajari.

b. Kegiatan inti

1) Melanjutkan pembelajaran tentang teks news item
2) Bersama menganalisa generic structure dari teks news item yang dibuat oleh siswa
3) Menanyakan kembali kepada siswa apa-apa saja yang kita tulis kalau membuat teks news item

c. Penutup

1) Guru menanyakan kesulitan-kesulitan yang dialami siswa ketika proses belajar mengajar sedang berlangsung
2) Guru menyimpulkan materi pembelajaran.

8. Sumber belajar

f. Buku English Alive for senior high school

g. Look Ahead for Senior High School 1

h. Learning to Use English

i. English dictionary

j. Dan sumber lain yang relevan

9. Penilaian

a. Indicator Penilaian

Teknik penilaian : tes tulisan

Bentuk Instrumen : essay test

Contoh soal : terlampir

Skor maksimal = 5 x 20= 100

Nilai maksimal = 100

Nilai siswa = Skor perolehan x 100
Skor maksimal

Tanobato, 2017

Guru Mata Pelajaran	**Researcher**
Evi Sari Kartika, S.Pd	**Nirmala Aini**
NIP. 19790410 200701 2 005	**NIM: 13 340 0020**

Appendix 3

INSTRUMENT TEST (Pre-test after Testing Validity)

Information: This test is just to know your ability in reading comprehension and there is no affected in your appraisal in final examination of this school.

Name :

Class :

Instruction: Read the news item carefully and answer the question below. Each one is followed by several questions about it. The questions are 1-20 items and you have 60 minutes to answer all the questions. Then, you choose the best one answer, A, B, C, D or E to each question. Give cross mark (X) on your answer.

Text for number 1-10

One Dead as Tornadoes lash Illinois, U.S.

A tornado touched down near Rochelle, Illinois, Thursday evening, leaving one dead and causing substantial damage.

The fatality took place in Fairdale, Illinois. Patti Thompson, public information officer for the Illinois Emergency Management Agency, confirmed for USA Today early Friday.

The victim was a 67 years old woman, the Rockford Fire Department confirmed via Twitter on Friday. Eleven more people were treated for injuries at local hospitals, the fire agency said. The tiny hamlet of Fairdale is about 60 miles northwest of Chicago and took a direct hit when a large twister crossed Interstate 39.

The Rockford Fire Dept. said in a tweet from Fairdale that "all structures in town are damaged". The tornado swept across the town of Hillcrest, about 80 miles west of Chicago and just north of Rochelle. The weather forced the cancellation of more than 800 flights at Chicago's O'Hare International Airport and delayed hundreds more.

NBC News

1. What is the mainly about the text?
   a. About death in U.S

b. About disaster
c. About U.S
d. About victims because of tornadoes
e. About damaging because of tornadoes

2. What is main idea of the third paragraph?
   a. Eleven people injuries at local hospital
   b. A woman was a victim because of tornadoes
   c. Elephant people injuries at local hospital
   d. Women are a victim and eleven people injuries at local hospital
   e. A woman was a victim and eleven people injuries at local hospital
3. What is the source of the news?
   a. USA today
   b. The Rockford Fire Dept.
   c. NBC News
   d. Twitter
   e. Daily Mail

4. How many victims in the text?
   a. 67
   b. 800
   c. 1
   d. 12
   e. 55
5. Where is the disaster happened?
   a. Chicago
   b. Fairdale
   c. Rochelle, Illinois

d. United States of America

e. Las Vegas

6. How many flights are canceled by tornadoes?
   a. More than 880 flights
   b. More than 39 flights
   c. More than 800 flights
   d. More than 60 flights
   e. More than 67 flights
7. The **tiny** hamlet of Fairdale is about 60 miles northwest of Chicago and took a direct hit when a large twister crossed Interstate 39.

   What is the synonym of underline word?
   a. Tall
   b. Big
   c. Fat
   d. Small
   e. Long

8. The victim was a 67 years old **woman**, the Rockford Fire Department confirmed via Twitter on Friday.

   What is the synonym of underline word?
   a. Female
   b. Boy
   c. Man
   d. Men
   e. Hero
9. A tornado touched **down** near Rochelle, Illinois, Thursday evening, leaving one dead and causing substantial damage.

   What is the antonym of underline word?

a. Behind
b. Offsite
c. Up
d. Between
e. Near

10. The victim was a 67 years **old** woman, the Rockford Fire Department confirmed via Twitter on Friday.

    What is the antonym of underline word?

    a. Strong
    b. Brave
    c. Young
    d. Bold
    e. Good

Text for number 11-20

Stowaway in Garuda Flight

Mario Steve Ambarita, 21, was caught on Tuesday, April 7, as he emerged from a Garuda Indonesia plane that had just landed at the Soekarno-Hatta International airport. What made him suspicious was the fact that he was exiting from the plane's wheel well, and not through the door like everyone else.

What prompted Mario to do such a reckless thing? He said he simply wanted to see Jakarta, where he was born, and meet with his idol, the president. He sneaked into a plane and fly 949 kilometers while sitting in the landing gear dock.

Mario admitted that he snuck into the plane before it took off from the Sultan Syarif Kasim II airport in Pekanbaru, Riau, in western Indonesia and that he stayed in the wheel well during the 105-minute flight.

He arrived alive and well in Jakarta. The airport clinic said Mario was fine but perhaps needed to recover from his unusual ordeal. “We don’t know how he was able to enter the (restricted) area,” Garuda Indonesia’s vice president for corporate communications, Pujobroto, told Kompas.com. “He knew that the plane would stop for a moment before taking off”. That was when he entered the plane through the wheel,” Pujobroto said.

Kompas.com

11. What is the topic of the text?
    a. Garuda flight
    b. Airport
    c. Stowaway
    d. Plane
    e. Stranger
12. What is the main information in the second paragraph?
    a. Talking about the reasons of the man
    b. Talking about him arrival to Jakarta
    c. Talking about his place of birth
    d. Talking about president
    e. Talking about plane
13. The following statements are the part of this text. Which one is the source of this text?
    a. There is no source
    b. In the first paragraph

c. In the second paragraph

d. In the third paragraph

e. In the fourth paragraph

14. What is the title of the news?

b. Stowaway in Garuda Flight

c. Garuda Flight

d. Stayaway Flight

e. Stranger man in Garuda Flight

f. Straight of Garuda Flight

15. Where is the plane landed?

a. Sultan Syarif Kasim II airport in Pekanbaru

b. Soekarno-Hatta International Airport

c. Jakarta The airport clinic

d. Riau

e. North Sumatera

16. He arrived **alive** and well in Jakarta.

What is the antonym of underline word?

a. Dead

b. Fine

c. Nice

d. Strength

e. Live

17. He arrived alive and **well** in Jakarta.

What the synonym of the underline word?

a. Sick

b. Shock

c. Fine

d. Scary

e. Sorrow

18. He said he simply wanted to see Jakarta, where he was born, and meet with his **idol**, the president.

    What is the synonym of underline word?

    a. Enemy

    b. Haters

    c. Classmate

    d. Beloved

    e. Friend

19. **He** knew that the plane would stop for a moment before taking off. (Line four in paragraph four).

    The underline word refers to…….

    a. Soekarno-Hatta

    b. Mario

    c. Pujobroto

    d. Sutan Syarif Kasim

    e. A man

20. What can the readers learn from the text?

    a. Readers have to be a good people

    b. Readers shall go by plane

    c. Readers must visit Jakarta

    d. Readers must visit the president

    e. Readers have to visit Java Island

Padangsidmpuan, 2017

Validator

Sojuangon Rambe, S.S., MPd.

NIP. 19790815 200604 1 003

APPENDIX 4

INSTRUMENT TEST (Post-test after Testing Validity)

Information: This test is just to know your ability in reading comprehension and there is no affected in your appraisal in final examination of this school.

Name :

Class :

Instruction: Read the news item carefully and answer the question below. Each one is followed by several questions about it. The questions are 1-20 items and you have 60 minutes to answer all the questions. Then, you choose the best one answer, A, B, C, D or E to each question. Give the cross mark (X) on your answer.

Text for number 1-11

A Hidden Boy in Wheel Well of Airplane Survived

A boy 16 years old has survived a dangerous journey hidden in the wheel well of airplane. It was a 5 hours flight from California to Hawaii.

The boy had run away from home and climbed a fence at the airport in San Jose, California. He crossed the tarmac and crawled into the wheel well of Hawaiian airlines flight 45.

According to FBI special agent Tom Simon, the boy quickly lost consciousness as temperature in the compartment sank as low as minus 80 degrees Fahrenheit. It was 62 degrees Celsius below zero.

The boy got an apparent miracle. After he had been unconscious for most of journey, the boy regained his consciousness about an hour after the plane landed on Sunday morning. The boy hopped down from the wheel well. He started wandering around the airport grounds, where was spotted by ground crew.

The boy was turned over to local child protection officials. A medical examination showed that he appeared to have been unharmed.

Since records began in 1947, about 100 wheel well stowaways are thought to have attempted to board flights. Around three-quarters of them died. “Our primary concern now is for the well being of the boy, who is exceptionally lucky to have survived”, Hawaiian Airlines said in a statement.

USA Daily

21. What is topic of the text?
    a. A hidden boy in Wheel Well of Airplane
    b. Hawaiian Airlines
    c. Stowaway
    d. Airplane
    e. FBI reports
22. What is main idea of the third paragraph?
    f. Temperature of the wheel well
    g. Tom Simon
    h. Passengers of the plane
    i. FBI special agent
    j. Statement of FBI special agent about temperature of wheel well

23. The following statements are the part of this text. Which one is the newsworthy of this text?
    a. In the first paragraph
    b. In the second paragraph
    c. In the third paragraph
    d. In the fourth paragraph
    e. There is no newsworthy

24. How old the boy has survived a dangerous journey hidden in the wheel well of airplane?
    a. 45 years old
    b. 16 years old
    c. 5 years old
    d. 62 years old
    e. 80 years old
25. What is the number flight of Hawaiian Airlines?
    a. 16
    b. 80
    c. 45
    d. 62
    e. 100
26. When the plane landed?
    a. On Sunday
    b. In the morning
    c. On Monday
    d. On Friday
    e. On Sunday morning

27. What is the airport's name in California?
    a. San Jose
    b. San Juan
    c. Tom Simon
    d. Hawaiian Airlines
    e. FBI
28. What is the character of the boy?

a. Shy
b. Coward
c. Brave
d. Weak
e. Scary

29. A boy 16 years old has survived a **dangerous** journey hidden in the wheel well of airplane.

    The antonym of the underlined word is …

    a. Scary
    b. Sorrowful
    c. Safe
    d. Funny
    e. Cute

30. According to FBI special agent Tom Simon, the boy **quickly** lost consciousness as temperature in the compartment sank as low as minus 80 degrees Fahrenheit.

    What is the antonym of underline word?

    a. Accurate
    b. Fast
    c. Slowly
    d. Speed
    e. Good

31. After he had been unconscious for most of **journey**, the boy regained his consciousness about an hour after the plane landed on Sunday morning.

    What is synonym of underline word?

    a. Running
    b. Hunting
    c. Trip
    d. Diving

e. Stay

Text for number 12-20

Earthquake Aftershock Hits Nepal and India, Magnitude 6,7

A strong earthquake aftershock struck Nepal and India on Sunday, shaking building in New Delhi and trigging an avalanche in the Himalaya.

The United States Geological Survey said the tremor was 6,7 magnitude, less than the 7,9 quake that struck the region on Saturday killing at least 1.900 people.

"Another one, we have an aftershock right now," Indian mountaineer Arjun Vajpai told Reuters by telephone from base camp on Mount Makalu, 20 km (12 mile) from Everest.

Screams and the sound of an avalanche could be heard over the phone line Vajpai was speaking on. At Everest base camp, Romanian climber Alex Gavan tweeted that the aftershock had set off three avalanches.

Indian Mail

32. What is topic of the text?
    a. Avalanches
    b. Earthquake in Nepal and India
    c. Mount Everest
    d. Himalaya
    e. Climber in Himalaya mountain
33. What is main idea of the fourth paragraph?
    a. Tweet of Romanian climber
    b. The condition of avalanches
    c. The situation in Himalaya and tweet from Romanian climber
    d. Reports by Romanian climber
    e. Reports by Vajpai
34. Who is the informant of the news?
    a. Indian mountaineer
    b. The United States Geological Survey

c. Romanian climber
d. Arjun Vajpai and Alex Gavan
e. Phone and tweeter

35. What is the effect of earthquake aftershock?
    a. Made the climbers are killed
    b. Shaking building in New Delhi and trigging an avalanche in the Himalaya
    c. Shaking building in New Delhi
    d. Trigging an avalanche in the Himalaya
    e. Made the mountaineers are killed

36. How the tremor of earthquake aftershock?
    a. 7,9 magnitude
    b. 6,7 magnitude
    c. 7, 6 magnitude
    d. 9,7 magnitude
    e. 2,0 magnitude
37. What is the source of the news?
    a. Indian mountaineer
    b. The United States Geological Survey
    c. Indian Mail
    d. Romanian climber
    e. Arjun Vajpai and Alex Gavan
38. When the earthquake aftershock happened?
    a. On Sunday
    b. In the morning
    c. On Monday

d. On Tuesday

e. On Sunday morning

39. The United States Geological Survey said the tremor was 6,7 magnitude, **less** than the 7,9 quake that struck the region on Saturday killing at least 1.900 people.

    What is the antonym of underline word?

    a. More

    b. Sell

    c. Shell

    d. Too

    e. Shall

40. A **strong** earthquake aftershock struck Nepal and India on Sunday, shaking building in New Delhi and trigging an avalanche in the Himalaya.

    What is the antonym of underline word?

    a. Brave

    b. Weak

    c. Shy

    d. Bold

    e. Coward

Padangsidimpuan, 2017

Validator

Sojuangon Rambe, S.S., MPd.

NIP. 19790815 200604 1 003

Appendix 5

Key Answer

Pre-Test	Post-Test
1. A	1. A
2. E	2. E
3. C	3. A
4. C	4. B
5. C	5. C
6. C	6. E
7. D	7. A
8. A	8. C
9. C	9. C
10. C	10. C
11. C	11. C
12. A	12. B
13. E	13. C
14. A	14. D
15. B	15. B
16. A	16. B
17. C	17. C
18. D	18. A
19. B	19. A
20. A	20. B

Appendix 6

Validity of Pre-Test

No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
2	1	0	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1
3	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1
4	1	1	1	1	1	0	1	1	0	0	0	1	1	1	1	1	1	1
5	1	1	0	1	0	0	0	1	0	1	1	0	0	1	0	0	1	0
6	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
7	0	1	1	0	0	0	1	0	1	1	1	1	1	1	0	1	1	0
8	1	1	1	0	1	0	1	1	0	0	0	0	1	1	1	0	0	1
9	0	1	0	0	1	0	1	1	1	1	0	1	0	1	1	1	1	1
10	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0
11	1	1	1	0	0	0	1	0	1	0	1	0	1	0	0	0	0	0
12	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	1
14	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	1
15	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	1	1	1	1	0	1	1	1	1	0	1	0	1	1	1	1	1	1
17	1	0	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	0
18	1	1	1	1	1	0	1	0	1	0	0	1	0	1	1	1	0	0
19	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1

20	0	0	1	1	0	0	1	0	1	1	0	1	1	1	0	1	0	1
21	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1
22	0	0	1	1	0	1	1	0	1	0	1	1	1	0	1	1	1	1
N=22	18	17	6	21	7	9	19	16	18	19	14	21	19	14	18	9	10	16
p	0.7	0.7	0.8	0.7	0.6	0.4	0.8	0.7	0.7	0.6	0.4	0.7	0.8	0.7	0.6	0.7	0.8	0.7
q	0.2	0.3	0.2	0.3	0.4	0.6	0.2	0.3	0.2	0.4	0.6	0.3	0.2	0.3	0.4	0.3	0.2	0.3

Appendix 7

Validity of Post-Test

No	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**1**
1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	0	1	1	
2	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0	1	0	1	
3	1	1	1	1	0	0	1	0	0	1	1	0	0	0	0	0	1	1	
4	0	1	1	1	1	0	0	1	0	1	1	1	1	0	1	1	1	1	
5	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	1	
6	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	0	1	1	
7	0	1	0	1	1	0	1	1	0	1	1	1	1	1	1	0	1	1	
8	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0	0	1	1	
9	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0	0	1	1	
10	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	1	1	
11	0	1	1	1	1	0	1	1	0	1	1	1	1	1	0	0	1	0	
12	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0	0	1	1	
13	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0	0	1	1	
14	1	0	1	1	0	0	1	1	0	0	1	0	1	1	0	0	1	1	
15	0	1	1	1	1	0	1	1	0	1	1	1	1	1	0	0	1	1	
16	1	1	1	0	1	0	1	1	0	1	0	1	0	1	0	0	1	0	
17	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	
18	1	1	0	0	1	0	1	1	0	0	0	1	0	1	0	1	1	1	
19	0	0	0	0	0	1	1	0	1	0	1	1	0	1	0	1	0	0	
20	1	1	1	0	1	1	1	1	0	1	1	1	1	1	0	0	0	1	
21	1	1	1	1	1	0	1	1	0	1	1	1	0	1	0	0	1	1	

22	1	1	1	0	1	1	0	1	0	1	1	0	0	0	0	0	0	1	
N= 22	17	18	6	17	21	10	8	20	5	20	19	18	15	17	6	5	15	19	1
p	0.7	0.7	0.8	0.5	0.7	0.3	0.8	0.8	0.1	0.8	0.8	0.8	0.7	0.7	0.2	0.1	0.7	0.7	
q	0.2	0.2	0.2	0.4	0.3	0.6	0.1	0.1	0.8	0.2	0.1	0.1	0.2	0.2	0.8	0.8	0.2	0.2	

Appendix 8

Reliability of Pre-test

NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Xt	Xt^2
1	1	1	0	1	1	1	0	0	1	1	1	0	0	1	1	1	0	1	1	0	1	0	0	1	0	15	225
2	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	22	484
3	1	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	20	400
4	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	0	21	441
5	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	21	441
6	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	23	529
7	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	22	484
8	1	1	1	0	1	1	0	1	1	0	1	0	1	0	1	1	1	1	1	1	0	1	1	1	1	19	361
9	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	22	484
10	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	22	484
11	0	1	1	0	0	0	1	1	1	0	1	1	1	0	0	1	1	0	1	0	0	1	1	1	1	15	225
12	1	1	1	1	1	0	1	1	0	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	0	20	400
13	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	23	529
14	1	1	0	1	1	1	1	0	1	1	1	1	1	1	0	0	0	1	1	0	0	1	1	1	0	17	289
15	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	23	529
16	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	23	529
17	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22	484

18	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	20	400
19	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	22	400
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	23	529
21	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	22	484
22	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	23	529
N=22	17	18	6	18	9	8	19	17	16	20	15	18	17	18	20	16	21	17	16	15	20	19	19	18	18	521	10901
p	0.88	0.88	0.68	0.88	0.88	0.88	0.76	0.88	0.88	0.8	0.84	0.88	0.88	0.88	0.8	0.88	0.84	0.88	0.88	0.6	0.8	0.88	0.76	0.88	0.72	$\sum X_t$	$\sum X_t^2$
q	0.12	0.12	0.32	0.12	0.12	0.12	0.24	0.12	0.12	0.2	0.16	0.12	0.12	0.12	0.2	0.12	0.16	0.12	0.12	0.4	0.2	0.12	0.24	0.12	0.28		
pq	0.1106	0.1106	0.2168	0.1106	0.1106	0.1106	0.1882	0.1106	0.1106	0.16	0.1334	0.1106	0.1106	0.1106	0.16	0.1106	0.1334	0.1106	0.1106	0.24	0.16	0.1106	0.1882	0.1106	0.2022	3.3	

Appendix 9

Reliability of Post-test

NO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Xt	X_t^2
1	1	1	0	1	1	1	0	0	1	1	1	0	0	1	1	1	0	1	1	0	1	0	0	1	0	15	225
2	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	22	484
3	1	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	20	400
4	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	0	21	441

5	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	20	400
6	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	23	529
7	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	22	484
8	1	1	1	0	1	1	0	1	1	0	1	0	1	0	1	1	1	1	1	1	0	1	1	1	1	19	361
9	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	22	484
10	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	1	22	484
11	0	1	1	0	0	0	1	1	1	1	1	1	1	0	0	1	1	0	1	0	0	1	1	1	1	16	256
12	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	22	484
13	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	23	529
14	1	1	0	1	1	1	1	0	1	1	1	1	1	1	0	0	0	1	1	0	0	1	1	1	0	17	289
15	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	23	529
16	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	23	529
17	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22	484
18	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	0	0	1	20	400
19	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	22	484
20	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	22	484
21	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	22	484
22	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	21	441
N =	17	19	9	17	8	11	18	18	19	17	15	19	19	18	17	15	17	17	18	16	21	18	19	18	20	52	11

22																									3	051
p	0.84	0.84	0.72	0.88	0.88	0.88	0.84	0.84	0.88	0.84	0.88	0.88	0.88	0.84	0.88	0.84	0.84	0.84	0.84	0.84	0.64	0.84	0.88	0.76	0.88	0.8	$\sum Xt$	$\sum Xt^2$
q	0.16	0.16	0.28	0.12	0.12	0.12	0.16	0.16	0.12	0.16	0.12	0.12	0.16	0.12	0.16	0.16	0.16	0.16	0.16	0.36	0.16	0.12	0.24	0.12	0.2		
pq	0.134	0.134	0.2002	0.1006	0.1006	0.1006	0.134	0.134	0.1006	0.134	0.1006	0.1006	0.134	0.1006	0.134	0.134	0.134	0.134	0.134	0.2300	0.134	0.1006	0.1882	0.1006	0.16	3.4	

Appendix 10

Calculation of $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

A. Calculation of Pre-test

1. Mean score from score total (M_t)

$$M_t = \frac{X_t}{N}$$

$$M_t = \frac{506}{22} = 16.86$$

2. Standard Deviation (SD_t)

$$SD_t = \sqrt{\frac{X_{t^2}}{N} - \left(\frac{X_t}{N}\right)^2}$$

$$SD_t = \sqrt{\frac{9280}{22} - \left(\frac{506}{22}\right)^2}$$

$$SD_t = \sqrt{309.3 - 16.86^2}$$

$$SD_t = \sqrt{309.3 - 284.2}$$

$$SD_t = \sqrt{25.1} = 5.00$$

3. Mean Score (M_p)

Item 1

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n1}$$

$$M_{pl} = \frac{22+20+21+19+7+21+12+15+10+22+16+19+22+17+14+22+20+19+21}{18}$$

$$M_{pl} = \frac{418}{18} = 18.17$$

Item 2

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n2}$$

$$M_{pl} = \frac{22+21+19+7+21+15+12+18+15+10+16+19+22+21+14+22+20+19+21+21}{19}$$

$$M_{pl} = \frac{392}{19} = 17.81$$

Item 3

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n3}$$

$$M_{pl} = \frac{22+21+19+21+15+18+10+22+16+19+22+21+17+14+22+17+20+17+20+17+19}{20}$$

$$M_{pl} = \frac{415}{22} = 17.29$$

Item 4

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n4}$$

$$M_{pl} = \frac{22+20+21+!9+7+21+22+16+19+22+21+17+14+22+17+20+17+21}{17}$$

$$M_{pl} = \frac{390}{17} = 18.57$$

Item 5

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n5}$$

$$M_{pl} = \frac{22+20+19+12+18+15+22+16+19}{9}$$

$$M_{pl} = \frac{163}{9} = 18.11$$

Item 6

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n6}$$

$$M_{pl} = \frac{21+21+15+22+16+22+21+17+22+20+17+21+19+17+18+16}{15}$$

$$M_{pl} = \frac{254}{15} = 19.53$$

Item 7

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n7}$$

$$M_{pl} = \frac{22+20+21+19+15+12+18+10+22}{9}$$

$$M_{pl} = \frac{159}{9} = 17.66$$

Item 8

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n8}$$

$$M_{pl} = \frac{22+20+21+19+7+21+12+19}{8}$$

$$M_{pl} = \frac{141}{8} = 17.62$$

Item 9

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n9}$$

$$M_{pl} = \frac{22+20+21+21+15+18+15+10+16+19}{10}$$

$$M_{pl} = \frac{177}{10} = 17.17$$

Item 10

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n10}$$

$$M_{pl} = \frac{22+20+21+7+21+15+18+15+22+16+19+22+17+20+19+21+21+18+19}{19}$$

$$M_{pl} = \frac{389}{19} = 20.47$$

Item 11

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n11}$$

$$M_{pl} = \frac{22+20+15+10+22+19+22+21+22+17+19+21+12+18}{14}$$

$$M_{pl} = \frac{263}{14} = 18.78$$

Item 12

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n12}$$

$$M_{pl} = \frac{22+20+21+19+21+15+18+15+22+16+19+22+17+14+22+17+20+17+19+5+21}{21}$$

$$M_{pl} = \frac{382}{21} = 18.19$$

Item 13

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n13}$$

$$M_{pl} = \frac{22+20+21+19+21+15+12+15+10+22+16+19+22+21+17+22+17+20}{18}$$

$$M_{pl} = \frac{451}{18} = 18.04$$

Item 14

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n14}$$

$$M_{pl} = \frac{22+20+21+19+7+21+15+12+18+15+22+19+22+21+17+14+22+17+19+12}{20}$$

$$M_{pl} = \frac{395}{20} = 17.95$$

Item 15

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n15}$$

$$M_{pl} = \frac{22+21+19+21+12+18+15}{7}$$

$$M_{pl} = \frac{128}{7} = 18.28$$

Item 16

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n16}$$

$$M_{pl} = \frac{22+20+21+19+21+15+18+15+22+19+22+21+17+14+17+20+17+4+21}{19}$$

$$M_{pl} = \frac{403}{19} = 18.31$$

Item 17

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n17}$$

$$M_{pl} = \frac{22+20+21+19+7+21+15+18+15+22+19+22+21+17+22+20+17+19+4+21+12}{21}$$

$$M_{pl} = \frac{432}{21} = 18.00$$

Item 18

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n18}$$

$$M_{pl} = \frac{22+20+21+19+21+12+18+22+16+19+22+21+22+17+20+17+19+21+12+21}{20}$$

$$M_{pl} = \frac{419}{20} = 19.045$$

Item 19

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n11}$$

$$M_{pl} = \frac{22+20+21+19+21+15+18+15+10+22+16+21+14+22+17+20+17+12+18}{19}$$

$$M_{pl} = \frac{357}{19} = 18.78$$

Item 20

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n20}$$

$$M_{pl} = \frac{22+20+21+19+21+15+12+18+16+22+21+17+14+22+17+20+17+19+21}{18}$$

$$M_{pl} = \frac{424}{18} = 18.43$$

Item 21

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n21}$$

$$M_{pl} = \frac{20+21+7+22+19+21+17+22+17+19+4+21+5+12}{14}$$

$$M_{pl} = \frac{270}{14} = 19.28$$

Item 22

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n22}$$

$$M_{pl} = \frac{22+21+17+17+19+21+18}{7}$$

$$M_{pl} = \frac{135}{7} = 19.28$$

Item 23

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n23}$$

$$M_{pl} = \frac{22+20+19+21+15+18+15+10+22+19+22+17+22+17+19+21+21+18+19}{19}$$

$$M_{pl} = \frac{357}{19} = 18.78$$

Item 24

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n10}$$

$$M_{pl} = \frac{22+20+21+7+21+15+18+15+22+16+19+22+17+20+19+21+21+18+19}{19}$$

$$M_{pl} = \frac{389}{19} = 20.47$$

Item 25

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n13}$$

$$M_{pl} = \frac{22+20+21+19+21+15+12+15+10+22+16+19+22+21+17+22+17+20}{18}$$

$$M_{pl} = \frac{451}{18} = 18.04$$

4. Calculation of the formulation $r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

Item 1

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.17-16.86}{5.00} \quad \frac{\overline{0.7}}{0.2}$

$r_{pbi} = \frac{1.31}{5.00} \quad \overline{3.5}$

$r_{pbi} = 0.262 \text{ x } 1.8 = 0.471$

Item 2

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{17.81-16.86}{5.00} \quad \frac{\overline{0.7}}{0.3}$

$r_{pbi} = \frac{0.95}{5.00} \quad \overline{2.33}$

$r_{pbi} = 0.19 \text{ x } 1.5 = 0.288$

Item 3

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{17.29-16.86}{5.00} \quad \frac{\overline{0.8}}{0.2}$

$r_{pbi} = \frac{0.43}{5.00} \quad \overline{4}$

$r_{pbi} = 0.086 \text{ x } 2 = 0.172$

Item 4

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.57-16.86}{5.00} \quad \frac{\overline{0.7}}{0.3}$

$r_{pbi} = \frac{1.71}{5.00} \quad \overline{2.33}$

$r_{pbi} = 0.342 \text{ x } 1.52 = 0.519$

Item 5

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.40 - 16.86}{5.00} \quad \sqrt{\frac{0.6}{0.4}}$$

$$r_{pbi} = \frac{1.54}{5.00} \quad \sqrt{1.5}$$

r_{pbi} = 0.308 x 1.22 = 0.375

Item 6

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{19.53 - 16.86}{5.00} \quad \sqrt{\frac{0.4}{0.6}}$$

$$r_{pbi} = \frac{2.67}{5.00} \quad \sqrt{0.66}$$

r_{pbi} = 0.534 x 0.812 = 0.433

Item 7

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{17.92 - 16.86}{5.00} \quad \sqrt{\frac{0.8}{0.2}}$$

$$r_{pbi} = \frac{1.06}{5.00} \quad \sqrt{4}$$

r_{pbi} = 0.212 x2 = 0.424

Item 8

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.57 - 16.86}{5.00} \quad \sqrt{\frac{0.7}{0.3}}$$

$$r_{pbi} = \frac{1.71}{5.00} \quad \sqrt{2.33}$$

r_{pbi} = 0.342 x 1.52 = 0.519

Item 9

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.17 - 16.86}{5.00} \quad \sqrt{\frac{0.7}{0.3}}$$

$r_{pbi} = \frac{1.31}{5.00} \quad \overline{2.33}$

$r_{pbi} = 0.262 \times 1.52 = 0.398$

Item 10

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{20.47 - 16.86}{5.00} \quad \frac{\overline{0.6}}{0.4}$

$r_{pbi} = \frac{3.61}{5.00} \quad \overline{1.5}$

$r_{pbi} = 0.722 \times 1.22 = 0.880$

Item 11

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.78 - 16.86}{5.00} \quad \frac{\overline{0.4}}{0.6}$

$r_{pbi} = \frac{1.92}{5.00} \quad \overline{0.66}$

$r_{pbi} = 0.384 \times 0.81 = 0.311$

Item 12

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.19 - 16.86}{5.00} \quad \frac{\overline{0.8}}{0.2}$

$r_{pbi} = \frac{1.33}{5.00} \quad \overline{4}$

$r_{pbi} = 0.266 \times 2 = 0.532$

Item 13

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.04 - 16.86}{5.00} \quad \frac{\overline{0.8}}{0.2}$

$r_{pbi} = \frac{1.18}{5.00} \quad \overline{4}$

$r_{pbi} = 0.236 \times 2 = 0.472$

Item 14

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{17.95 - 16.86}{5.00} \quad \frac{\overline{0.7}}{0.3}$$

$$r_{pbi} = \frac{1.09}{5.00} \quad \overline{2.33}$$

r_{pbi} = 0.218 x 1.52 = 0.331

Item 15

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{19.05-16.86}{5.00} \quad \frac{\overline{0.6}}{0.4}$$

$$r_{pbi} = \frac{2.19}{5.00} \quad \overline{1.5}$$

r_{pbi} = 0.438 x 1.22 = 0.534

Item 16

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.31-16.86}{5.00} \quad \frac{\overline{0.7}}{0.3}$$

$$r_{pbi} = \frac{1.45}{5.00} \quad \overline{2.33}$$

r_{pbi} = 0.29 x 1.52 = 0.440

Item 17

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.00-16.86}{5.00} \quad \frac{\overline{0.8}}{0.2}$$

$$r_{pbi} = \frac{1.14}{5.00} \quad \overline{4}$$

r_{pbi} = 0.228 x 2 = 0.456

Item 18

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$r_{pbi} = \frac{19.04-16.86}{5.00} \quad \overline{\frac{0.7}{0.3}}$

$r_{pbi} = \frac{2.18}{5.00} 2.33$

r_{pbi} = 0.436 x 1.52 = 0.662

Item 19

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.78 - 16.86}{5.00} \quad \overline{\frac{0.6}{0.4}}$

$r_{pbi} = \frac{1.92}{5.00} \quad \overline{1.5}$

r_{pbi} = 0.384 x 1.22 = 0.468

Item 20

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.43-16.86}{5.00} \quad \overline{\frac{0.7}{0.2}}$

$r_{pbi} = \frac{1.57}{5.00} \quad \overline{3.5}$

r_{pbi} = 0.314 x 1.87 = 0.587

Item 21

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{19.28-16.86}{5.00} \quad \overline{\frac{0.4}{0.6}}$

$r_{pbi} = \frac{2.42}{5.00} \quad \overline{0.66}$

r_{pbi} = 0.484 x 0.812 = 0.393

Item 22

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{19.28-16.86}{5.00} \quad \overline{\frac{0.2}{0.8}}$

$r_{pbi} = \frac{2.42}{5.00} \quad \overline{0.25}$

r_{pbi} = 0.484 x 0.5 = 0.242

Item 23

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{1.92-16.86}{5.00} \quad \frac{\overline{0.6}}{0.4}$$

$$r_{pbi} = \frac{1.92}{5.00} \quad \overline{1.5}$$

r_{pbi} = 0.384 x 1.22 = 0.468

Item 24

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.82-16.86}{5.00} \quad \frac{\overline{0.7}}{0.2}$$

$$r_{pbi} = \frac{1.96}{5.00} \quad \overline{3.5}$$

r_{pbi} = 0.392 x 1.87 = 0.7333

Item 25

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.73-16.86}{5.00} \quad \frac{\overline{0.7}}{0.2}$$

$$r_{pbi} = \frac{1.87}{5.00} \quad \overline{3.5}$$

r_{pbi} = 0.374 x 1.87 = 0.699

Calculation of $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

B. Calculation of Post-test

5. Mean score from score total (M_t)

$$M_t = \frac{X_t}{N}$$

$$M_t = \frac{520}{22} = 17.33$$

6. Standard Deviation (SD_t)

$$SD_t = \sqrt{\frac{X_{t^2}}{N} - \left(\frac{X_t}{N}\right)^2}$$

$$SD_t = \sqrt{\frac{9378}{22} - \left(\frac{520}{22}\right)^2}$$

$$SD_t = \sqrt{312.6 - 17.33^2}$$

$$SD_t = \sqrt{312.6 - 300.32}$$

$$SD_t = \sqrt{12.28} = 3.50$$

7. Mean Score (M_p)

Item 1

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n1}$$

$$M_{pl} = \frac{22+19+12+22+21+20}{6}$$

$$M_{pl} = \frac{137}{6} = 22.83$$

Item 2

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n2}$$

$$M_{pl} = \frac{22+19+12+20+22+21+19+20+21+22+19+20+17+20+14+17+19+20}{18}$$

$$M_{pl} = \frac{402}{18} = 18.27$$

Item 3

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n3}$$

$$M_{pl} = \frac{22+19+12+20+22+21+20+21+22+19+20+17+14+20+14+22+19+20+13}{18}$$

$$M_{pl} = \frac{431}{18} = 17.95$$

Item 4

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n4}$$

$$M_{pl} = \frac{22+19+12+20+22+21+19+20+21+19+20+17+14+20+22+20}{17}$$

$$M_{pl} = \frac{330}{17} = 19.41$$

Item 5

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n5}$$

$$M_{pl} = \frac{22+19+20+22+21+19+20+21+22+19+20+17+20+14+22+17+19+20+13+14+11}{21}$$

$$M_{pl} = \frac{392}{21} = 18.66$$

Item 6

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n6}$$

$$M_{pl} = \frac{22+22+14+19+13+13+19+15+12+11}{10}$$

$$M_{pl} = \frac{160}{10} = 16$$

Item 7

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n7}$$

$$M_{pl} = \frac{22+19+12+22+21+19}{6}$$

$$M_{pl} = \frac{115}{6} = 19.16$$

Item 8

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n8}$$

$$M_{pl} = \frac{22+19+20+22+21+19+20+21+22+19+20+17+14+20+14+22+17+19+20+13}{19}$$

$$M_{pl} = \frac{470}{19} = 18.07$$

Item 9

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n17}$$

$$M_{pl} = \frac{22+12+20+22+21+19+20+21+22+19+20+17+14+20+14+22+17+20+14}{19}$$

$$M_{pl} = \frac{419}{19} = 18.21$$

Item 10

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n10}$$

$$M_{pl} = \frac{22+19+12+20+22+21+19+20+21+22+19+20+17+20+14+22+19+20+13+14}{20}$$

$$M_{pl} = \frac{439}{20} = 18.29$$

Item 11

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n11}$$

$$M_{pl} = \frac{22+19+12+20+22+21+19+20+21+22+19+20+17+14+20+22+14+19+20+13+14}{21}$$

$$M_{pl} = \frac{451}{21} = 18.04$$

Item 12

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n12}$$

$$M_{pl} = \frac{22+19+20+22+21+19+20+21+22+19+20+17+20+14+22+17+14}{16}$$

$$M_{pl} = \frac{457}{16} = 18.28$$

Item 13

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n13}$$

$$M_{pl} = \frac{22+19+20+22+21+19+20+21+22+19+20+17+14+20+22+19+14}{17}$$

$$M_{pl} = \frac{406}{17} = 18.45$$

Item 14

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n14}$$

$$M_{pl} = \frac{22+19+21+19+20+21+22+19+20+17+14+20+14+22+17}{15}$$

$$M_{pl} = \frac{399}{15} = 18.13$$

Item 15

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n15}$$

$$M_{pl} = \frac{22+20+22+21+19+22}{6}$$

$$M_{pl} = \frac{126}{6} = 21$$

Item 16

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n16}$$

$$M_{pl} = \frac{19+20+17+14+11}{5}$$

$$M_{pl} = \frac{81}{5} = 16.2$$

Item 7

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n9}$$

$$M_{pl} = \frac{22+14+13+11+12}{5}$$

$$M_{pl} = \frac{72}{5} = 14.4$$

Item 18

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n18}$$

$$M_{pl} = \frac{22+19+12+20+22+21+19+20+21+22+20+17+14+20+22}{14}$$

$$M_{pl} = \frac{418}{14} = 18.17$$

Item 19

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n11}$$

$$M_{pl} = \frac{22+12+20+22+21+19+20+21+22+19+20+14+20+22+17+14+20}{16}$$

$$M_{pl} = \frac{427}{16} = 18.56$$

Item 20

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n20}$$

$$M_{pl} = \frac{22+19+12+20+22+21+19+20+21+22+19+20+20+14+22+17+14+19+20+13}{21}$$

$$M_{pl} = \frac{433}{21} = 18.04$$

Item 21

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n21}$$

$$M_{pl} = \frac{22+19+20+22+21+19+20+21+22+19+20+17+14+20+14+22+17+14+19}{18}$$

$$M_{pl} = \frac{483}{18} = 17.88$$

Item 22

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n22}$$

$$M_{pl} = \frac{22+19+20+22+21+19+21+22+19+20+20+22+17+14+19+20+13}{16}$$

$$M_{pl} = \frac{439}{16} = 18.29$$

Item 23

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n23}$$

$$M_{pl} = \frac{22+19+20+22+21+19+20+21+22+19+20+17+14+20+22+17+14+19+20}{17}$$

$$M_{pl} = \frac{444}{17} = 18.8$$

Item 24

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n24}$$

$$M_{pl} = \frac{22+19+12+20+22+19+20+21+22+19+20+20+20+14+22+17+14+19+20}{15}$$

$$M_{pl} = \frac{451}{15} = 18.04$$

Item 25

$$M_{pl} = \frac{\text{total score of students' score that true item answer}}{n25}$$

$$M_{pl} = \frac{22+20+22+21+20+21+22+19+17+14+20+14+22+17+14+19+20+13+14+13}{16}$$

$$M_{pl} = \frac{470}{16} = 18.07$$

8. Calculation of the formulation $r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

Item 1

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{17.5-17.33}{3.50} \quad \frac{\overline{0.7}}{0.2}$$

$$r_{pbi} = \frac{0.17}{3.50} \quad \overline{3.5}$$

r_{pbi}= 0.048 x 1.87 = 0.089

Item 2

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.27-17.33}{3.50} \quad \frac{\overline{0.7}}{0.2}$$

$$r_{pbi} = \frac{0.94}{3.50} \quad \overline{3.5}$$

r_{pbi}= 0.268 x 1.87 = 0.501

Item 3

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{17.95 - 17.33}{3.50} \quad \frac{\overline{0.8}}{0.2}$$

$$r_{pbi} = \frac{0.62}{3.50} \quad \overline{4}$$

r_{pbi}= 0.177 x 2 = 0.354

Item 4

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{19.41 - 17.33}{3.50} \quad \frac{\overline{0.5}}{0.4}$$

$$r_{pbi} = \frac{2.08}{3.50} \quad \overline{1.25}$$

r_{pbi}= 0.59 x 1.11 = 0.654

Item 5

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$r_{pbi} = \frac{18.66 - 17.33}{3.50} \quad \overline{\frac{0.7}{0.3}}$

$r_{pbi} = \frac{1.33}{3.50} \quad \overline{2.3}$

r_{pbi}= 0.38 x 1.51 = 0.573

Item 6

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{16 - 17.33}{3.50} \quad \overline{\frac{0.3}{0.6}}$

$r_{pbi} = \frac{-1.33}{3.50} \quad \overline{0.5}$

r_{pbi}= -0.38 x 0.70 = -0.266

Item 7

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{17.92-17.33}{3.50} \quad \overline{\frac{0.8}{0.1}}$

$r_{pbi} = \frac{0.59}{3.50} \quad \overline{8}$

r_{pbi}= 0.168 x 2.8 = 0.470

Item 8

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.07-17.33}{3.50} \quad \overline{\frac{0.8}{0.1}}$

$r_{pbi} = \frac{0.74}{3.50} \quad \overline{8}$

r_{pbi}= 0.211 x 2.8 = 0.590

Item 9

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{14.4-17.33}{3.50} \quad \overline{\frac{0.1}{0.8}}$

$r_{pbi} = \frac{2.93}{3.50} \quad \overline{0.125}$

r_{pbi}= -0.83 x 0.35 = -0.290

Item 10

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.29-17.33}{3.50} \quad \frac{\overline{0.8}}{0.2}$$

$$r_{pbi} = \frac{0.96}{3.50} \quad \overline{4}$$

r_{pbi}= 0.274 x 2 = 0.548

Item 11

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.04-17.33}{3.50} \quad \frac{\overline{0.8}}{0.1}$$

$$r_{pbi} = \frac{0.71}{3.50} \quad \overline{8}$$

r_{pbi}= 0.202 x 2.8 = 0.565

Item 12

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.28-17.33}{3.50} \quad \frac{\overline{0.8}}{0.1}$$

$$r_{pbi} = \frac{0.95}{3.50} \quad \overline{8}$$

r_{pbi}= 0.271 x 2.8 = 0.758

Item 13

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.45-17.33}{3.50} \quad \frac{\overline{0.7}}{0.2}$$

$$r_{pbi} = \frac{1.12}{3.50} \quad \overline{3.5}$$

r_{pbi}= 0.32 x 1.87 = 0.598

Item 14

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.13-17.33}{3.50} \quad \frac{\overline{0.7}}{0.2}$$

$$r_{pbi} = \frac{0.8}{3.50} \quad \overline{3.5}$$

r_{pbi}= 0.228 x 1.87 = 0.426

Item 15

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{21-17.33}{3.50} \quad \frac{\overline{0.2}}{0.8}$$

$$r_{pbi} = \frac{3.67}{3.50} \quad \overline{0.25}$$

r_{pbi}= 1.048 x 0.5 = 0.524

Item 16

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{16.2 - 17.33}{3.50} \quad \frac{\overline{0.1}}{0.8}$$

$$r_{pbi} = \frac{-1.13}{3.50} \quad \overline{0.125}$$

r_{pbi}= -3.22 x 0.35 = -1.127

Item 17

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.21 - 17.33}{3.50} \quad \frac{\overline{0.7}}{0.2}$$

$$r_{pbi} = \frac{1.050}{3.50} \quad \overline{3.5}$$

r_{pbi}= 0.3 x 1.87 = 0.561

Item 18

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$$

$$r_{pbi} = \frac{18.17 - 17.33}{3.50} \quad \frac{\overline{0.7}}{0.2}$$

$r_{pbi} = \frac{0.84}{3.50} \quad \overline{3.5}$

r_{pbi}= 0.24 x 1.87 = 0.448

Item 19

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.56 - 17.33}{3.50} \quad \frac{\overline{0.7}}{0.2}$

$r_{pbi} = \frac{1.23}{3.50} \quad \overline{3.5}$

r_{pbi}= 0.351 x 1.87 = 0.656

Item 20

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.04 - 17.33}{3.50} \quad \frac{\overline{0.8}}{0.2}$

$r_{pbi} = \frac{0.71}{3.50} \quad \overline{4}$

r_{pbi}= 0.202 x 2 = 0.404

Item 21

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{17.88 - 17.33}{3.50} \quad \frac{\overline{0.9}}{0.1}$

$r_{pbi} = \frac{0.55}{3.50} \quad \overline{9}$

r_{pbi}= 0.157 x 3 = 0.471

Item 22

$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \frac{\overline{p}}{q}$

$r_{pbi} = \frac{18.29 - 17.33}{3.50} \quad \frac{\overline{0.8}}{0.2}$

$r_{pbi} = \frac{0.96}{3.50} \quad \overline{4}$

r_{pbi}= 0.274 x 2 = 0.548

Item 23

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.8 - 17.33}{3.50} \quad \sqrt{\frac{0.8}{0.2}}$$

$$r_{pbi} = \frac{1.17}{3.50} \quad \sqrt{4}$$

r_{pbi}= 0.334 x 2 = 0.668

Item 24

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.04 - 17.33}{3.50} \quad \sqrt{\frac{0.8}{0.1}}$$

$$r_{pbi} = \frac{0.71}{3.50} \quad \sqrt{8}$$

r_{pbi}= 0.202 x 2.8 = 0.565

Item 25

$$r_{pbi} = \frac{M_{p-M_t}}{SD_t} \quad \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.07-17.33}{3.50} \quad \sqrt{\frac{0.8}{0.1}}$$

$$r_{pbi} = \frac{0.74}{3.50} \quad \sqrt{8}$$

r_{pbi}= 0.211 x 2.8 = 0.590

Appendix 11

Table Validity of Pre-Test

No	Mp	Mt	SDt	p	q	$r_{pbi} = \frac{M_p - M_t}{SD_t} \frac{\overline{p}}{q}$	Rt on 5% significant	Interpretation
1	18.17	16.86	5.00	0.7	0.2	0.471	0.444	Valid
2	17.81	16.86	5.00	0.7	0.3	0.457	0.444	Valid
3	17.29	16.86	5.00	0.8	0.2	0.484	0.444	Valid
4	18.57	16.86	5.00	0.7	0.3	0.519	0.444	Valid
5	18.40	16.86	5.00	0.6	0.4	0.288	0.444	Invalid
6	19.53	16.86	5.00	0.4	0.6	0.433	0.444	Valid
7	17.92	16.86	5.00	0.8	0.2	0.172	0.444	Invalid
8	17.00	16.86	5.00	0.7	0.3	0.311	0.444	Invalid
9	18.17	16.86	5.00	0.7	0.2	0.331	0.444	Invalid
10	20.47	16.86	5.00	0.6	0.4	0.880	0.444	Valid
11	18.78	16.86	5.00	0.4	0.6	0.519	0.444	Valid
12	18.19	16.86	5.00	0.7	0.3	0.532	0.444	Valid
13	18.04	16.86	5.00	0.8	0.2	0.472	0.444	Valid
14	17.95	16.86	5.00	0.7	0.3	0.448	0.444	Valid
15	19.05	16.86	5.00	0.6	0.4	0.242	0.444	Invalid
16	18.31	16.86	5.00	0.7	0.3	0.449	0.444	Valid
17	18.00	16.86	5.00	0.8	0.2	0.456	0.444	Valid
18	19.04	16.86	5.00	0.7	0.3	0.662	0.444	Valid
19	18.78	16.86	5.00	0.6	0.4	0.468	0.444	Valid
20	18.43	16.86	5.00	0.7	0.2	0.587	0.444	Valid
21	19.28	16.86	5.00	0.4	0.6	0.456	0.444	Valid
22	19.28	16.86	5.00	0.2	0.8	0.534	0.444	Valid
23	18.78	16.86	5.00	0.6	0.4	0.468	0.444	Valid
24	18.82	16.86	5.00	0.7	0.2	0.733	0.444	Valid
25	18.73	16.86	5.00	0.7	0.2	0.699	0.444	Valid

Appendix 12

Table Validity of Post-Test

No	Mp	Mt	SDt	p	q	$r_{pbi} = \frac{M_p - M_t}{SD_t} \frac{\overline{p}}{q}$	Rt on 5% significant	Interpretation
1	17.50	17.33	3.50	0.7	0.2	0.561	0.444	Valid
2	18.27	17.33	3.50	0.7	0.2	0.501	0.444	Valid
3	17.95	17.33	3.50	0.8	0.2	0.354	0.444	Invalid
4	19.41	17.33	3.50	0.5	0.4	0.654	0.444	Valid
5	18.66	17.33	3.50	0.7	0.3	0.573	0.444	Valid
6	16.00	17.33	3.50	0.3	0.6	-0.266	0.444	Invalid
7	17.92	17.33	3.50	0.8	0.1	-0.290	0.444	Invalid
8	18.07	17.33	3.50	0.8	0.1	0.590	0.444	Valid
9	14.40	17.33	3.50	0.1	0.8	0.470	0.444	Valid
10	18.29	17.33	3.50	0.8	0.2	0.548	0.444	Valid
11	18.04	17.33	3.50	0.8	0.1	0.565	0.444	Valid
12	18.28	17.33	3.50	0.8	0.1	0.758	0.444	Valid
13	18.45	17.33	3.50	0.7	0.2	0.598	0.444	Valid
14	18.13	17.33	3.50	0.7	0.2	0.486	0.444	Valid
15	21.00	17.33	3.50	0.2	0.8	0.524	0.444	Valid
16	16.20	17.33	3.50	0.1	0.8	0.089	0.444	Invalid
17	18.21	17.33	3.50	0.7	0.2	-1.127	0.444	Invalid
18	18.17	17.33	3.50	0.7	0.2	0.448	0.444	Valid
19	18.56	17.33	3.50	0.7	0.2	0.656	0.444	Valid
20	18.04	17.33	3.50	0.8	0.2	0.484	0.444	Valid
21	17.88	17.33	3.50	0.9	0.1	0.471	0.444	Valid
22	18.29	17.33	3.50	0.8	0.2	0.548	0.444	Valid
23	18.80	17.33	3.50	0.8	0.2	0.668	0.444	Valid
24	18.04	17.33	3.50	0.8	0.1	0.565	0.444	Valid
25	18.07	17.33	3.50	0.8	0.1	0.590	0.444	Valid

Appendix 13

Reliability Pre Test

To get reliability of the test, the researcher uses formula KR-20:

$$R_{11} = \frac{n}{n-1} \quad \frac{S_{t^2} - \sum pq}{S_{t^2}}$$

N= 22

$\sum Xt = 506$

$\sum Xt^2 = 9280$

$\sum pq = 4.07$

$$S_t^2 = \sum Xt^2 - \frac{\sum xt}{N}^2$$

$$= 9280 - \frac{506}{22}^2 = 9280 - 16.86^2 = 9280 - 284.26 = 8995.74$$

$$S_t^2 = \frac{\sum Xt2}{22} = \frac{8995.74}{22}$$

$$S_t^2 = 299.858$$

$$R_{11} = \frac{n}{n-1} \quad \frac{S_{t^2} - \sum pq}{S_{t^2}}$$

$$R_{11} = \frac{22}{22-1} \quad \frac{299.858 - 4.07}{299.858} = \frac{22}{21} \quad \frac{65.83}{75.66}$$

= (1.03) (0.98)
= 1.01 (r_{11}> 0.70 = reliable)

Test is reliable if $r_{count} > r_{tabel}$. Based on calculation above, the tests have high reliability.

Appendix 14

Reliability Post Test

To get reliability of the test, the researcher uses formula KR-20:

$$R_{11} = \frac{n}{n-1} \quad \frac{S_t^2 - \sum pq}{S_t^2}$$

N= 22

$\sum Xt = 520$

$\sum Xt^2 = 9378$

$\sum pq = 9.83$

$$S_t^2 = \sum Xt^2 - \frac{\sum xt}{N}^2$$

$$= 9378 - \frac{520}{22}^2 = 9378 - 17.33^2 = 9378 - 300.32 = 9077.68$$

$$S_t^2 = \frac{\sum Xt2}{N} = \frac{9077.68}{22}$$

$$S_t^2 = 302.589$$

$$R_{11} = \frac{n}{n-1} \quad \frac{S_t^2 - \sum pq}{S_t^2}$$

$$R_{11} = \frac{22}{22-1} \quad \frac{302.589 - 9.83}{302.589} = \frac{22}{21} \quad \frac{292.759}{302.589}$$

= (1.03) (0.96)

= 0.99 (r_{11}> 0.70 = reliable)

Test is reliable if $r_{count} > r_{tabel}$. Based on calculation above, the test have high reliability.

Appendix 15

Score of Experiment Class and Control Class on Pre-Test

1. **Score of Experimental Class Post Test before Using Probable Passage**

No	The Initial Name of Students (n)	Pre-Test
1	AH	60
2	CAH	60
3	EFB	75
4	EHB	65
5	FHN	70
6	HA	50
7	IF	65
8	IA	30
9	IN	75
10	IR	55
11	LH	60
12	LN	55
13	LK	30
14	MR	70
15	MT	45
16	NS	75
17	NH	60
18	PN	50

19	RR	45
20	SA	70
21	SA	65
TOTAL		**1275**

2. Score of Control Class

No	**The Initial Name of Students (n)**	**Pre-Test**
1	AH	55
2	AR	60
3	AM	65
4	AP	40
5	DR	60
6	EYB	50
7	FN	65
8	FM	50
9	HAH	65
10	IAH	55
11	IT	65

12	JH	50
13	KN	60
14	NAR	55
15	NS	70
16	RR	60
17	PR	45
18	SA	70
19	WD	60
20	YRS	65
21	ZK	55
22	AAN	60
TOTAL		**1320**

Appendix 16

Score of Experiment Class and Control Class on Post Test

1. **Score of Experimental Class Post Test after Using Probable Passage**

No	The Initial Name of Students (n)	Post-Test
1	AH	75
2	CAH	90
3	EFB	85
4	EHB	70
5	FHN	80
6	HA	90
7	IF	65
8	IA	80
9	IN	70
10	IR	65
11	LH	80
12	LN	75
13	LK	85
14	MR	80
15	MT	75
16	NS	75
17	NH	85

18	PN	70
19	RR	80
20	SA	80
21	SA	85
TOTAL		**1640**

2. Score of Control Class

No	**The Initial Name of Students (n)**	**Post-Test**
1	AH	60
2	AR	70
3	AM	65
4	AP	75
5	DR	60
6	EYB	60
7	FN	70
8	FM	65
9	HAH	75
10	IAH	70

11	IT	65
12	JH	55
13	KN	70
14	NAR	75
15	NS	80
16	RR	65
17	PR	70
18	SA	55
19	WD	80
20	YRS	50
21	ZK	70
22	AAN	70
TOTAL		**1475**

Appendix 17

HOMOGENITY TEST (PRE-TEST)

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

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

Hypotheses:

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

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

A. Variant of the X MIA-2 class is:

No	Xi	Xi^2
1	30	900
2	30	900
3	35	1225
4	35	1225
5	40	1600
6	40	1600
7	40	1600
8	55	3025
9	55	3025
10	55	3025

11	55	3025
12	55	3025
13	55	3025
14	60	3600
15	60	3600
16	60	3600
17	60	3600
18	60	3600
19	65	4225
20	65	4225
21	65	4225
	1075	**57875**

n = 21

xi = 1075

$_{xi}$ 2 = 57875

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

$$= \frac{21\ 57875 - 1075^{\ 2}}{21(21-1)}$$

$$= \frac{1215375-1155625}{420}$$

$$= \frac{59750}{420}$$

= 142.261

B. Variant of the X MIA-1 class is:

No	Xi	Xi^2
1	40	1600
2	45	2025
3	50	2500
4	50	2500
5	50	2500
6	50	2500
7	55	3025
8	55	3025
9	55	3025
10	55	3025
11	60	3600
12	60	3600
13	60	3600
14	60	3600
15	60	3600
16	60	3600
17	60	3600
18	65	4225
19	65	4225
20	65	4225

21	70	4900
22	70	4900
	1320	**73430**

n = 21

xi = 1230

$_{xi}$ 2 = 77375

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

$$= \frac{22\ 73430 - 1320^{\ 2}}{22(22-1)}$$

$$= \frac{1615460-1742400}{22\ 21}$$

$$= \frac{126940}{462}$$

= 274.76

C. Variant of the X IIS-1 class is:

No	**Xi**	**Xi^2**

1	35	1225
2	45	2025
3	45	2025
4	50	2500
5	50	2500
6	55	3025
7	55	3025
8	60	3600
9	60	3600
10	60	3600
11	60	3600
12	65	4225
13	65	4225
14	65	4225
15	70	4900
16	70	4900
17	70	4900
18	70	4900
19	75	5625
20	75	5625
21	75	5625
	1275	**79875**

n = 21

xi = 1275

$_{xi}$ 2 = 79875

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

$$= \frac{21\ 79875 - 1275^{\ 2}}{21(21-1)}$$
$$= \frac{1677375-1625625}{21\ 20}$$
$$= \frac{41750}{420}$$
$$= 123.21$$

The Formula was used to test hypothesis was:

1. X IIS-1 and X MIA-1 :

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

$$F = \frac{142.261}{-274.76}$$

= -0.51

After doing the calculation. researcher found that F_{count} = -0.51 with α 5% and dk = 21 and 22 from the distribution list F. researcher found that F_{table} = 2.07. cause $F_{count} < F_{table}$ (-0.51 < 2.07). So. there is no difference the variant between the X IIS-1 class and X MIA-1 class. It means that the variant is homogenous.

2. X IIS-1 and X MIA-2:

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

$$F = \frac{142.261}{123.21} = 1.15$$

After doing the calculation. researcher found that F_{count} = 1.15 with α 5% and dk = 21 and 21 from the distribution list F. researcher found that F_{table} = 2.07. cause $F_{count} < F_{table}$ (1.15 < 2.07). So. there is no difference the variant between the X IIS-1 class and X MIA-2 class. It means that the variant is homogenous**.**

3. X MIA-1 and X MIA-2:

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

$$F = \frac{123.21}{-274.76}$$

= -0.44

After doing the calculation. researcher found that F_{count} = -0.44 with α 5% and dk = 22 and 21 from the distribution list F. researcher found that F_{table} = 2.07. cause $F_{count} < F_{table}$ (-0.44 < 2.07). So. there is no difference the variant between the X MIA-1 class and X MIA-2 class. It means that the variant is homogenous**.**

Appendix 18

HOMOGENITY TEST (POST-TEST)

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

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

Hypotheses:

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

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

A. Variant of the X MIA-2class is:

No	Xi	Xi^2
1	65	4225
2	70	4900
3	70	4900
4	70	4900
5	75	5625
6	75	5625
7	75	5625

8	75	5625
9	75	5625
10	80	6400
11	80	6400
12	80	6400
13	80	6400
14	80	6400
15	80	6400
16	80	6400
17	85	7225
18	85	7225
19	85	7225
20	85	7225
21	90	8100
	1640	**128850**

n = 21

xi = 1640

$_{xi}$ 2 = 128850

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

$$= \frac{21\ 128850 - 1640^{\ 2}}{21(21-1)}$$

$$= \frac{2705850-2689600}{21\ 20}$$

$$= \frac{16250}{420}$$

= 38.69

B. Variant of the X MIA-1 class is:

No	Xi	Xi^2
1	50	2500
2	55	3025
3	55	3025
4	60	3600
5	60	3600
6	60	3600
7	65	4225
8	65	4225
9	65	4225
10	65	4225
11	70	4900
12	70	4900
13	70	4900
14	70	4900
15	70	4900
16	70	4900

17	70	4900
18	75	5625
19	75	5625
20	75	5625
21	80	6400
22	80	6400
	1475	**100200**

n = 22

xi = 1640

$_{xi}2$ = 128850

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

$$= \frac{22\ 100200 - 1475^{\ 2}}{22(22-1)}$$

$$= \frac{2204400-2175625}{22\ 21}$$

$$= \frac{28775}{461}$$

= 62.28

The Formula was used to test hypothesis was:

1. X MIA-1 and X MIA-2:

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

$$F = \frac{62.28}{38.69}$$

= 1.60

After doing the calculation. researcher found that F_{count} = 1.60 with α 5% and dk = 21 and 22 from the distribution list F, researcher found that F_{table} = 2.07. cause $F_{count} < F_{table}$ (1.60 < 2.07). So, there is no difference the variant between the X MIA-1 class and X MIA-2 class. It means that the variant is homogenous**.**

Appendix 19

RESULT OF NORMALITY TEST IN PRE TEST

RESULT OF THE NORMALITY TEST OF X MIA-2 IN PRE-TEST (EXPERIMENTAL CLASS)

1. The score of X MIA-2 class in pre test from low score to high score:

30	45	45	50	50	55	55	60	60	60
60	65	65	65	70	70	70	70	75	75
75									

2. High = 75

   Low = 30

   Range = High – Low

   = 75 - 30

   = 45

3. Total of Classes = 1 + 3.3 log (n)

   = 1 + 3.3 log (21)

   = 1 + 3.3 (1.32)

   = 1 + 4.35

   = 5.35

   = 6

4. Length of Classes = $\frac{range}{total\ of\ class}$ = $\frac{45}{5}$ = 9

5. Mean

Interval Class	F	X	x'	fx'	x'^2	fx'^2
30 – 38	1	35	+3	3	9	9
39 – 47	2	43	+2	4	4	8
48 – 56	4	52	+1	4	1	4
57 – 65	7	**61**	0	0	0	0
66 – 74	4	70	-1	-4	1	4
75 – 83	3	79	-2	-6	2	6

i = 9	21	-	-	1	-	31

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

= 61 + 9 ($\frac{1}{21}$)

= 61 + 9 (0.04)

= 61 + 0.36

= 61.36

$$SD_t = i\ \sqrt{\frac{fx'^2}{n} - \left(\frac{fx'}{n}\right)^2}$$

$$= 9\ \sqrt{\frac{31}{21} - \left(\frac{1}{21}\right)^2}$$

$$= 9\ \sqrt{1.47 - (0.04)^2}$$

$$= 9\ \sqrt{1.47 - 0.00}$$

$$= 9\ \sqrt{1.47}$$

= 9 x 1.21

= 10.89

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\frac{(f_0-f_h)}{f_h}$
75 – 83	83.5	2.03	0.4788	0.09	1.89	3	0.58
66 – 74	74.5	1.20	0.3849	0.23	4.83	4	-0.17
57 – 65	65.5	0.38	0.1480	0.18	3.78	7	0.85
48 – 56	56.5	-0.44	0.32997	0.22	4.62	4	0.13
39 – 47	47.5	-1.27	0. 10204	0.83	1.68	2	0.19
30 – 38	38.5	-2.09	0.01831	0.01	0.21	1	3.76
	30.5	-2.83	0.00233				
						X^2	5.34

Based on the table above, the writer found that $x^2_{count} = 5.34$ while $x^2_{table} = 11.070$ cause $x^2_{count} < x^2_{table}$ (5.34 < 11.070) with degree of freedom (dk) = 6–1 = 5 and significant level α = 5%. So, distribution of X MIA-2 class (pre-test) is normal.

6. Median

No	Interval	F	Fk
1	30 – 38	1	1
2	39 – 47	2	3

3	48 – 56	4	7
4	**57 – 65**	**7**	14
5	66 – 74	4	19
6	75 – 84	3	22

Position of Me in the interval of classes is number 5.

Bb = 56.5

F = 4

fm = 7

i = 9

n = 21

1/2n= 10.5

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

$$= 56.5 + 9\ \frac{10.5-4}{7}$$

$$= 56.5 + 9\ (0.92)$$

$$= 56.5 + 8.28$$

$$= 64.78$$

7. Modus

No	Interval	F	Fk
1	30 – 38	1	1
2	39 – 47	2	3
3	48 – 56	4	7
4	**57 – 65**	**7**	14
5	66 – 74	4	19
6	75 – 84	3	22

$M_o = L + \frac{d_1}{d_1 + d_2}\ i$

L = 56.5 d_1 = 4 d_2 = 4 i = 9

M_o $= 56.5 + \frac{4}{4+4}\ 9$

$= 56.5 + 0.5\ (9)$

$= 56.5 + 4.5$

$= 61$

RESULT OF NORMALITY TEST IN PRE TEST

RESULT OF THE NORMALITY TEST OF X MIA-1 IN PRE-TEST (CONTROL CLASS)

1. The score of X MIA-1 class in pre test from low score to high score:

40	45	50	50	50	55	55	55	55	60
60	60	60	60	60	60	65	65	65	65
70	70								

2. High = 70

   Low = 40

   Range = High – Low

   = 70 – 40

   = 30

3. Total of Classes = 1 + 3.3 log (n)

   = 1 + 3.3 log (22)

   = 1 + 3.3 (1.34)

   = 1 + 4.42

   = 5.42

   = 5

4. Length of Classes $= \frac{range}{total\ of\ class} = \frac{30}{5} = 6$

5. Mean

Interval Class	F	X	x'	fx'	x'^2	fx'^2

40 – 45	2	43.5	+3	6	9	18
46 – 51	3	49.5	+2	6	4	12
52 – 57	4	55.5	+1	4	1	4
58 – 63	7	**61.5**	0	0	0	0
64 – 69	4	67.5	-1	-4	1	4
70 – 75	2	73.5	-2	-4	4	8
i = 6	22	-	-	8	-	46

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

$= 61.5 + 6 (\frac{8}{22})$

$= 61.5 + 6 (0.36)$

$= 61.5 + 2.16$

$= 63.66$

$$SD_t = i \sqrt{\frac{fx'^2}{n} - \left(\frac{fx'}{n}\right)^2}$$

$= 6 \sqrt{\frac{46}{22} - \left(\frac{8}{22}\right)^2}$

$= 6 \sqrt{2.09 - 0.36^2}$

$= 6 \sqrt{2.09 - 0.12}$

$= 6 \sqrt{1.97}$

$= 6 \times 1.40$

$= 8.4$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\frac{(f_0 - f_h)}{f_h}$

70 - 75	75.5	1.40	0.4192				
				0.16	3.25	2	-0.35
64 - 69	69.5	0.69	0.2549				
				-0.24	-5.28	4	-1.75
58 - 63	63.5	-0.01	0.49601				
				0.26	5.72	7	0.22
52 - 57	57.5	-0.73	0.23270				
				0.15	3.3	4	0.21
46 - 51	51.5	-1.44	0.07493			3	
				0.05	1.1	5	1.72
40 - 45	45.5	-2.16	0.01539				
				0.01	0.22	5	8.09
	41.5	-2.63	0.00427				
						X^2	8.14

Based on the table above. the writer found that $x^2_{count} = 8.14$ while $x^2_{table} = 11.070$ cause $x^2_{count} < x^2_{table}$ (8.14 < 11.070) with degree of freedom (dk) = 6–1 = 5 and significant level α = 5%. So distribution of X MIA-1 class (pre-test) is normal.

6. Median

No	Interval	F	Fk
1	40 – 45	2	3
2	46 – 51	3	6
3	52 – 57	4	10
4	**58 – 63**	**7**	17
5	64 – 69	4	21
6	70 – 75	2	23

Position of Me in the interval of classes is number 4. that:

Bb = 57.5

F = 4

fm = 7

i = 6

n = 22

1/2n= 11

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

$= 57.5 + 6 \ \frac{11-4}{7}$

$= 57.5 + 6\ (1)$

$= 57.5 + 6$

$= 63.5$

7. Modus

No	Interval	F	Fk
1	40 – 45	2	3
2	46 – 51	3	6
3	52 – 57	4	10
4	**58 – 63**	**7**	17
5	64 – 69	4	21
6	70 – 75	2	23
No	Interval	F	Fk

$M_o = L + \frac{d_1}{d_1 + d_2}\ i$

L = 57.5

d_1 = 4

d_2 = 4

i = 6

$M_o = 57.5 + \frac{4}{4+4}\ 6$

$= 57.5 + 0.5(6)$

= 57.5 + 3

= 60.5

RESULT OF NORMALITY TEST IN PRE TEST

RESULT OF THE NORMALITY TEST OF X IIS-1 IN PRE-TEST

1. The score of X IIS-1 class in pre test from low score to high score:

30	30	35	35	40	40	40	55	55	55
55	55	55	60	60	60	60	60	65	65
65									

2. High = 65

   Low = 30

   Range = High – Low

   = 65 - 30

   = 35

3. Total of Classes = 1 + 3.3 log (n)

   = 1 + 3.3 log (21)

   = 1 + 3.3 (1.32)

= 1 + 4.35

= 5.35

= 5

4. Length of Classes $= \frac{range}{total\ of\ class} = \frac{35}{5} = 7$
5. Mean

Interval Class	F	X	x'	fx'	x'^2	fx'^2
30 – 36	2	33	+3	6	9	18
37 – 43	2	40	+2	4	4	8
44 – 50	3	47	+1	3	1	3
51 – 57	6	**54**	0	0	0	0
58 – 64	5	61	-1	-5	1	5
65 – 71	3	68	-2	-6	4	12
i = 7	21	-	-	2	-	46

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

= 54 + 7 ($\frac{2}{21}$)

= 54 + 7 (0.09)

= 54 + 0.63

= 54.63

$$SD_t = i\ \sqrt{\frac{fx'^2}{n} - \left(\frac{fx'}{n}\right)^2}$$

$$= 7\ \sqrt{\frac{46}{21} - \left(\frac{2}{21}\right)^2}$$

$$= 7\ \sqrt{2.19 - (0.09)^2}$$

$$= 7\ \sqrt{2.19 - 0.0081}$$

$$= 7\ \sqrt{2.18}$$

= 7 x 1.47

= 10.29

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\frac{(f_0-f_h)}{f_h}$
65 – 71	71.5	1.63	0.4484				
				0.11	2.31	2	-0.13
58 – 64	64.5	0.95	0.3289				
				0.22	4.62	2	-0.56
51 – 57	57.5	0.27	0.1064				
				-0.23	-4.83	3	-1.62
44 – 50	50.5	-0.40	0.34458				
				0.20	4.2	6	0.42
37 – 43	43.5	-1.08	0.14007				
				0.10	2.1	5	1.38
30 – 36	36.5	-1.76	0.03920				
				0.03	0.63	3	3.76
	29.5	-2.44	0.00734				
						X^2	3.25

Based on the table above. the writer found that $x^2_{count} = 3.25$ while $x^2_{table} = 11.070$ cause $x^2_{count} < x^2_{table}$ (3.25 < 11.070) with degree of freedom (dk) = 6–1 = 5 and significant level α = 5%. So, distribution of X IIS-1 class (pre-test) is normal.

6. Median

No	Interval	F	Fk
1	30 – 36	2	2
2	37 – 43	2	4
3	44 – 50	3	7
4	**51 – 57**	**6**	13
5	58 – 64	5	18
6	65 – 71	3	21

Position of Me in the interval of classes is number 4.

Bb = 50.5

F = 3

fm = 6

i = 7

n = 21

1/2n= 10.5

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

$$= 50.5 + 7 \ \frac{10.5-3}{6}$$

$$= 50.5 + 7 \ (1.25)$$

$$= 50.5 + 8.75$$

$$= 59.25$$

7. Modus

No	Interval	F	Fk
1	30 – 36	2	2
2	37 – 43	2	4
3	44 – 50	3	7
4	**51 – 57**	**6**	13
5	58 – 64	5	18
6	65 – 71	3	21

$$M_o = L + \frac{d_1}{d_1 + d_2} \ i$$

L = 50.5

d_1 = 3

d_2 = 5

$i = 7$

$M_o = 50.5 + \frac{3}{3+5}\ 7$

$= 50.5 + 0.37\ (7)$

$= 51.5 + 2.59$

$= 53.09$

Appendix 20

RESULT OF NORMALITY TEST IN POST TEST

RESULT OF THE NORMALITY TEST OF X MIA-2 IN POST-TEST (EXPERIMENTAL CLASS)

1. The score of X MIA-2 class in post test from low score to high score:

65	70	75	75	75	75	75	80	80	80
80	80	80	80	80	85	85	85	85	90
90									

2. High =90

   Low = 65

   Range = High – Low

   = 90 – 65

   = 30

3. Total of Classes = 1 + 3.3 log (n)

   = 1 + 3.3 log (21)

   = 1 + 3.3 (1.32)

   = 1 + 4.35

   = 5.35

   = 5

4. Length of Classes $= \frac{range}{total\ of\ class} = \frac{30}{5} = 6$

5. Mean

Interval Class	F	X	x'	fx'	x'^2	fx'^2
65 – 70	2	67.5	+2	4	4	8
71 – 76	5	73.5	+1	5	1	5
77 – 82	8	**79.5**	0	0	0	0
83 – 88	4	85.5	-1	-4	1	4
89 – 94	2	91.5	-2	-4	4	8
i = 6	21	-	-	1	-	25

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

$= 79.5 + 6\ (\frac{1}{21})$

$= 79.5 + 6\ (0.04)$

$= 79.5 + 0.24$

$= 79.74$

$$SD_t = i\ \sqrt{\frac{fx'^2}{n} - \left(\frac{fx'}{n}\right)^2}$$

$= 6\ \sqrt{\frac{25}{21} - \left(\frac{1}{21}\right)^2}$

$= 6\ \sqrt{1.19 - 0.04^2}$

$= 6\ \sqrt{1.19 - 0.16}$

$= 6\ \sqrt{1.03}$

$= 6 \times 1.01 = 6.06$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\frac{(f_0-f_h)}{f_h}$
89 – 94	94.5	2.43	0.4925				
				0.06	1.26	2	0.58
83 – 88	88.5	1.44	0.4251				
				0.25	5.25	4	-0.23
77 – 82	82.5	0.45	0.1736				
				-0.12	-2.52	8	-4.17
71 – 76	76.5	-0.53	0. 29806				
				0.23	4.83	5	0.03
65 – 70	70.5	-1.52	0. 06426				
				0.05	1.05	2	0.90
	64.5	-2.51	0.00604				
						X^2	-2.89

Based on the table above. the reseracher found that x^2_{count} = -2.89 while x^2_{table} = 11.070 cause $x^2_{count} < x^2_{table}$ (-2.89 < 11.070) with degree of freedom (dk) = 6–1 = 5 and significant level α = 5%. So distribution of X MIA-2 class (post-test) is normal.

6. Median

No	Interval	F	Fk
1	65 – 70	2	2
2	71 – 76	5	7
3	**77 – 82**	**8**	15
4	83 – 88	4	19
5	89 – 94	2	21

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

Bb = 76.5

F = 5

fm = 8

i = 6

n = 21

1/2n= 10.5

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

$$= 76.5 + 6\ \frac{10.5-5}{8}$$

$$= 76.5 + 6\ (0.68)$$

$$= 76.5 + 4.08$$

$$= 80.58$$

7. Modus

No	Interval	F	Fk
1	65 – 70	2	2
2	71 – 76	5	7
3	**77 – 82**	**8**	15
4	83 – 88	4	19
5	89 – 94	2	21

$M_o = i \sqrt{\frac{fx'^2}{n} - \left(\frac{fx'}{n}\right)^2}$

L = 76.5

d_1 = 5

d_2 = 4

i = 6

$M_o = 76.5 + \frac{5}{5+4}\ 6$

= 76.5 + 0.55 (6)

= 76.5 + 3.3

= 79.8

RESULT OF NORMALITY TEST IN POST TEST

RESULT OF THE NORMALITY TEST OF X MIA-1 IN POST-TEST (CONTROL CLASS)

8. The score of X MIA-1 class in post test from low score to high score:

50	55	60	60	60	65	65	65	65	65
70	70	70	70	70	70	70	70	75	75
80	80								

9. High = 80

   Low = 50

   Range = High – Low

   = 80 - 50

   = 30

10. Total of Classes = 1 + 3.3 log (n)

    = 1 + 3.3 log (22)

    = 1 + 3.3 (1.34)

    = 1 + 4.42

    = 5.42

    = 6

11. Length of Classes $= \frac{range}{total\ of\ class} = \frac{30}{5} = 6$

12. Mean

Interval Class	F	X	x'	fx'	x'^2	fx'^2
50 – 55	2	52.5	+3	6	9	18
56 – 61	3	58.5	+2	6	4	12
62 – 67	5	64.5	+1	5	1	5
68 – 73	7	**70.5**	0	0	0	0
74 – 79	3	76.5	-1	-3	1	4
80 -85	2	83.5	-2	-4	4	8
i = 5	22	-	-	10	-	46

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

$= 70.5 + 5\ (\frac{10}{22})$

$= 70.5 + 5\ (0.45)$

$= 70.5 + 2.7$

$= 73.2$

$$SD_t = i\ \sqrt{\frac{fx'^2}{n} - \left(\frac{fx'}{n}\right)^2}$$

$= 6\ \sqrt{\frac{46}{22} - \left(\frac{10}{22}\right)^2}$

$= 6\ \sqrt{2.09 - 0.20}$

$= 6\ \sqrt{1.89}$

$= 6 \times 1.37$

$= 8.22$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\frac{(f_0-f_h)}{f_h}$
80 –85	85.5	1.49	0.4319				
				0.1555	3.3	2	-0.39
74 – 79	79.5	0.76	0.2764				
				0.21163	4.62	3	-0.35
68 – 73	73.5	-0.03	0.48803				
				0.24293	5.28	7	0.32
77 – 82	67.5	-0.69	0.25143				
				0.1673	3.52	5	0.42
71 – 76	61.5	-1.42	0.08379				
				0.06202	1.32	3	1.27
65 – 70	55.5	-2.15	0.01831				
				0.01	0.22	2	8.36
	49.5	-2.88	0.00256				
						X^2	9.36

Based on the table above. the reseracher found that x^2_{count} = 9.36 while x^2_{table} = 11.070 cause $x^2_{count} < x^2_{table}$ (9.36 < 11.070) with degree of freedom (dk) = 6–1 = 5 and significant level α = 5%. So distribution of X MIA-1 class (post-test) is normal.

13. Median

No	Interval	F	Fk
1	50 – 55	2	2
2	56 – 61	3	5
3	62 – 67	5	10
4	**68– 73**	**7**	17
5	74 – 79	3	20
6	80 – 85	2	22

Position of Me in the interval of classes is number 4. that:

Bb = 67.5

F = 5

fm = 7

i = 6

n = 22

1/2n= 11

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

$= 67.5 + 6\ \frac{11-5}{7}$

$= 67.5 + 6\ (0.85)$

$= 67.5 + 5.1$

$= 72.6$

14. Modus

No	Interval	F	Fk
1	50 – 55	2	2
2	56 – 61	3	5
3	62 – 67	5	10
4	**68– 73**	**7**	17
5	74 – 79	3	20
6	80 – 85	2	22

$M_o = L + \frac{d_1}{d_1 + d_2}\ i$

L = 67.5

d_1 = 5

d_2 = 3

i = 6

So.

$M_o = 67.5 + \frac{5}{5+3}\ 6$

= 67.5 + 0.62 (6)

= 67.5 + 3.72

= 71.22

Appendix 21

T-test of the Both Averages in Pre-Test

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

$$Tt = \frac{M_1 - M_2}{\sqrt{\frac{n_1 - 1\ s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}\quad \frac{1}{n_1} + \frac{1}{n_2}}}$$

$$Tt = \frac{61.36 - 63.66}{\sqrt{\frac{21 - 1\ 10.89 + \ 22 - 1\ 8.4}{21 + 22 - 2}\quad \frac{1}{21} + \frac{1}{22}}}$$

$$Tt = \frac{-2.3}{\sqrt{\frac{20\ 10.89\ + 21(8.4)}{41}\quad 0.047 + 0.045}}$$

$$Tt = \frac{-2.3}{\sqrt{\frac{217.8 + 176.4}{41}\quad 0.047 + 0.045}}$$

$$Tt = \frac{-2.3}{\sqrt{\frac{394.2}{41}\quad 0.092}}$$

$$Tt = \frac{-2.3}{\sqrt{9.614(0.092)}}$$

$$Tt = \frac{-2.3}{\sqrt{0.88}}$$

$$Tt = \frac{-2.3}{0.93}$$

Tt = -2.61

Based on researcher calculation result of homogeneity test of the both averages. researcher found that t_{count} = 0.86 with opportunity (1-α) = 1 – 5% = 95%

and dk = $n_1 + n_2 - 2 = 21 + 22 - 2 = 41$. $t_{table} = 1.6828$. So. $t_{count} < t_{table}$ (-2.16 < 1.6828) and H_0 is accepted. It means no difference the average between the first class as experimental class and the second class as control class in this research.

Appendix 22

T-test of the Both Averages in Post-Test

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

$$Tt = \frac{M_1 - M_2}{\frac{n_1 - 1\ s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}\quad \frac{1}{n_1} + \frac{1}{n_2}}$$

$$Tt = \frac{79.74 - 73.2}{\frac{21 - 1\ 5.82 + \ 22 - 1\ 8.22}{21 + 22 - 2}\quad \frac{1}{21} + \frac{1}{22}}$$

$$Tt = \frac{6.54}{\frac{20\ 5.82\ + 21(8.22)}{41}\quad 0.045 + 0.047}$$

$$Tt = \frac{6.54}{\frac{116.4 + 172.62}{41}\quad 0.092}$$

$$Tt = \frac{6.54}{\frac{289.02}{41}\quad 0.092}$$

$$Tt = \frac{6.54}{7.05\ (0.092)}$$

$$Tt = \frac{6.54}{0.64}$$

$$Tt = \frac{6.54}{0.8}$$

$$Tt = 8.175$$

Based on researcher calculation result of homogeneity test of the both averages. researcher found that t_{count} = 8.175 with opportunity (1-α) = 1 – 5% = 95% and dk = $n_1 + n_2 – 2 = 21 + 22 – 2 = 41$. t_{table} = 1.6828. So. $t_{count} > t_{table}$ (8.175 > 1.6828) and H_a is 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.

Appendix 23

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

Appendix 24

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

Appendix 25

Percentage Points of the t Distribution

Pr / df	0.25 / 0.50	0.10 / 0.20	0.05 / 0.10	0.025 / 0.050	0.01 / 0.02	0.005 / 0.010	0.001 / 0.002
1	1.00000	3.07768	6.31375	12.70620	31.82052	63.65674	318.30884
2	0.81650	1.88562	2.91999	4.30265	6.96456	9.92484	22.32712
3	0.76489	1.63774	2.35336	3.18245	4.54070	5.84091	10.21453
4	0.74070	1.53321	2.13185	2.77645	3.74695	4.60409	7.17318
5	0.72669	1.47588	2.01505	2.57058	3.36493	4.03214	5.89343
6	0.71756	1.43976	1.94318	2.44691	3.14267	3.70743	5.20763
7	0.71114	1.41492	1.89458	2.36462	2.99795	3.49948	4.78529
8	0.70639	1.39682	1.85955	2.30600	2.89646	3.35539	4.50079
9	0.70272	1.38303	1.83311	2.26216	2.82144	3.24984	4.29681
10	0.69981	1.37218	1.81246	2.22814	2.76377	3.16927	4.14370
11	0.69745	1.36343	1.79588	2.20099	2.71808	3.10581	4.02470
12	0.69548	1.35622	1.78229	2.17881	2.68100	3.05454	3.92963
13	0.69383	1.35017	1.77093	2.16037	2.65031	3.01228	3.85198
14	0.69242	1.34503	1.76131	2.14479	2.62449	2.97684	3.78739
15	0.69120	1.34061	1.75305	2.13145	2.60248	2.94671	3.73283
16	0.69013	1.33676	1.74588	2.11991	2.58349	2.92078	3.68615
17	0.68920	1.33338	1.73961	2.10982	2.56693	2.89823	3.64577
18	0.68836	1.33039	1.73406	2.10092	2.55238	2.87844	3.61048
19	0.68762	1.32773	1.72913	2.09302	2.53948	2.86093	3.57940
20	0.68695	1.32534	1.72472	2.08596	2.52798	2.84534	3.55181
21	0.68635	1.32319	1.72074	2.07961	2.51765	2.83136	3.52715
22	0.68581	1.32124	1.71714	2.07387	2.50832	2.81876	3.50499
23	0.68531	1.31946	1.71387	2.06866	2.49987	2.80734	3.48496
24	0.68485	1.31784	1.71088	2.06390	2.49216	2.79694	3.46678
25	0.68443	1.31635	1.70814	2.05954	2.48511	2.78744	3.45019
26	0.68404	1.31497	1.70562	2.05553	2.47863	2.77871	3.43500
27	0.68368	1.31370	1.70329	2.05183	2.47266	2.77068	3.42103
28	0.68335	1.31253	1.70113	2.04841	2.46714	2.76326	3.40816
29	0.68304	1.31143	1.69913	2.04523	2.46202	2.75639	3.39624
30	0.68276	1.31042	1.69726	2.04227	2.45726	2.75000	3.38518
31	0.68249	1.30946	1.69552	2.03951	2.45282	2.74404	3.37490
32	0.68223	1.30857	1.69389	2.03693	2.44868	2.73848	3.36531
33	0.68200	1.30774	1.69236	2.03452	2.44479	2.73328	3.35634
34	0.68177	1.30695	1.69092	2.03224	2.44115	2.72839	3.34793
35	0.68156	1.30621	1.68957	2.03011	2.43772	2.72381	3.34005

36	0.68137	1.30551	1.68830	2.02809	2.43449	2.71948	3.33262
37	0.68118	1.30485	1.68709	2.02619	2.43145	2.71541	3.32563
38	0.68100	1.30423	1.68595	2.02439	2.42857	2.71156	3.31903
39	0.68083	1.30364	1.68488	2.02269	2.42584	2.70791	3.31279
40	0.68067	1.30308	1.68385	2.02108	2.42326	2.70446	3.30688

Percentage Points of the t Distribution

	0.25	**0.10**	**0.05**	**0.025**	**0.01**	**0.005**	**0.001**
Pr	**0.50**	**0.20**	**0.10**	**0.050**	**0.02**	**0.010**	**0.002**
df							
41	0.68052	1.30254	1.68288	2.01954	2.42080	2.70118	3.30127
42	0.68038	1.30204	1.68195	2.01808	2.41847	2.69807	3.29595
43	0.68024	1.30155	1.68107	2.01669	2.41625	2.69510	3.29089
44	0.68011	1.30109	1.68023	2.01537	2.41413	2.69228	3.28607
45	0.67998	1.30065	1.67943	2.01410	2.41212	2.68959	3.28148
46	0.67986	1.30023	1.67866	2.01290	2.41019	2.68701	3.27710
47	0.67975	1.29982	1.67793	2.01174	2.40835	2.68456	3.27291
48	0.67964	1.29944	1.67722	2.01063	2.40658	2.68220	3.26891
49	0.67953	1.29907	1.67655	2.00958	2.40489	2.67995	3.26508
50	0.67943	1.29871	1.67591	2.00856	2.40327	2.67779	3.26141
51	0.67933	1.29837	1.67528	2.00758	2.40172	2.67572	3.25789
52	0.67924	1.29805	1.67469	2.00665	2.40022	2.67373	3.25451
53	0.67915	1.29773	1.67412	2.00575	2.39879	2.67182	3.25127
54	0.67906	1.29743	1.67356	2.00488	2.39741	2.66998	3.24815
55	0.67898	1.29713	1.67303	2.00404	2.39608	2.66822	3.24515
56	0.67890	1.29685	1.67252	2.00324	2.39480	2.66651	3.24226
57	0.67882	1.29658	1.67203	2.00247	2.39357	2.66487	3.23948
58	0.67874	1.29632	1.67155	2.00172	2.39238	2.66329	3.23680
59	0.67867	1.29607	1.67109	2.00100	2.39123	2.66176	3.23421
60	0.67860	1.29582	1.67065	2.00030	2.39012	2.66028	3.23171
61	0.67853	1.29558	1.67022	1.99962	2.38905	2.65886	3.22930
62	0.67847	1.29536	1.66980	1.99897	2.38801	2.65748	3.22696
63	0.67840	1.29513	1.66940	1.99834	2.38701	2.65615	3.22471
64	0.67834	1.29492	1.66901	1.99773	2.38604	2.65485	3.22253
65	0.67828	1.29471	1.66864	1.99714	2.38510	2.65360	3.22041
66	0.67823	1.29451	1.66827	1.99656	2.38419	2.65239	3.21837
67	0.67817	1.29432	1.66792	1.99601	2.38330	2.65122	3.21639
68	0.67811	1.29413	1.66757	1.99547	2.38245	2.65008	3.21446
69	0.67806	1.29394	1.66724	1.99495	2.38161	2.64898	3.21260
70	0.67801	1.29376	1.66691	1.99444	2.38081	2.64790	3.21079

71	0.67796	1.29359	1.66660	1.99394	2.38002	2.64686	3.20903
72	0.67791	1.29342	1.66629	1.99346	2.37926	2.64585	3.20733
73	0.67787	1.29326	1.66600	1.99300	2.37852	2.64487	3.20567
74	0.67782	1.29310	1.66571	1.99254	2.37780	2.64391	3.20406
75	0.67778	1.29294	1.66543	1.99210	2.37710	2.64298	3.20249
76	0.67773	1.29279	1.66515	1.99167	2.37642	2.64208	3.20096
77	0.67769	1.29264	1.66488	1.99125	2.37576	2.64120	3.19948
78	0.67765	1.29250	1.66462	1.99085	2.37511	2.64034	3.19804
79	0.67761	1.29236	1.66437	1.99045	2.37448	2.63950	3.19663
80	0.67757	1.29222	1.66412	1.99006	2.37387	2.63869	3.19526
∞							

Appendix 26

Probable Passage Schema

Adopted from June Preszler in Strategy to Help Struggling Readers

Title: _____

Problem

Cause

Solution

Setting

Characters

Unknown Words

_____

To Discover:

1. **2.** **3.**

Appendix 27

PHOTO RESEARCH

KEMENTERIAN AGAMA REPUBLIK INDONESIA
INSTITUT AGAMA ISLAM NEGERI PADANGSIDIMPUAN
FAKULTAS TARBIYAH DAN ILMU KEGURUAN
Jalan T. Rizal Nurdin Km. 4,5 Sihitang 22733
Telepon (0634) 22080 Faximile (0634) 24022

Nomor : B - 1596 /In.14/E.4c/TL.00/09/2017 19 September 2017
Hal : **Izin Penelitian**
Penyelesaian Skripsi.

Yth. Kepala SMA Negeri 1 Panyabungan Selatan
Kabupaten Mandailing Natal

Dengan hormat, Dekan Fakultas Tarbiyah dan Ilmu Keguruan Institut Agama Islam Negeri Padangsidimpuan menerangkan bahwa :

Nama : Nirmala Aini
NIM : 13 340 0020
Fakultas/Jurusan : Tarbiyah dan Ilmu Keguruan/TBI
Alamat : Jl. Situmba 3

adalah benar Mahasiswa IAIN Padangsidimpuan yang sedang menyelesaikan Skripsi dengan Judul **"The Effect of Probable Passage Strategy on Students' Reading Comprehension at Grade X SMA Negeri 1 Panyabungan Selatan".** Sehubungan dengan itu, kami mohon bantuan Bapak/Ibu untuk memberikan data dan informasi sesuai dengan maksud judul diatas.

Demikian disampaikan, atas kerja sama yang baik diucapkan terimakasih.

a.n. Dekan
Wakil Dekan Bidang Akademik

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

PEMERINTAH PROVINSI SUMATERA UTARA
DINAS PENDIDIKAN
SMA NEGERI 1 PANYABUNGAN SELATAN
Jln.Willem Iskander Tanobato Kecamatan Panyabungan Selatan 22952.

SURAT KETERANGAN
No. 422/154/SMA.1/2017

Yang bertanda tangan di bawah ini Kepala SMA Negeri 1 Panyabungan Selatan Kabupaten Mandailing Natal,

Nama	: **Drs. S U K Y A R**
NIP	:19640804 199303 1 004
Pangkat/Gol.Ruang	: Pembina/IVa
Jabatan	: Kepala Sekolah

dengan ini menerangkan bahwa :

Nama	: Nirmala Aini
NIM	: 13 340 0020
Fakultas/Jurusan	: Tarbiyah dan Ilmu Keguruan/TBI
Alamat	: Jl. Situmba 3

Benar telah melaksanakan Penelitian di SMA Negeri 1 Panyabungan Selatan dengan Judul : **"The Effect of Probable Passage Strategy on Students' Reading Comprehension at Grade X SMA Negeri 1 Panyabungan Selatan".**

Demikian Surat Keterangan ini dibuat dengan sebenarnya untuk dapat dipergunakan seperlunya.

Tanobato, 29 September 2017.

KEPALA SEKOLAH,

Drs. S U K Y A R
NIP. 19640804 199303 1 004

KEMENTERIAN AGAMA
INSTITUT AGAMA ISLAM NEGERIPADANGSIDIMPUAN
FAKULTAS TARBIYAH DANILMU KEGURUAN
JURUSAN TADRIS BAHASA INGGRIS

Jalan T.Rizal Nurdin Km 4,5 Sihitang 22733
Telepon 0634-22080 faximale 0634-24022

Nomor : 65 /In.14/E.6a/PP.00.9/10/2016 Padangsidimpuan, 11 Oktober 2016
Sifat : Biasa
Lamp : -
Hal : Pengesahan Judul dan Pembimbing Skripsi

KepadaYth.Bapak/Ibu:
1. Dr. Lelya Hilda, M.Si (Pembimbing I)
2. Sojuangon Rambe, S.S., M.Pd (Pembimbing II)

Di –
Padangsidimpuan

Assalamu'alaikumWr. Wb.

Dengan Hormat, Sehubungan dengan hasil sidang bersama tim pengkajian judul skipsi Jurusan Tadris Bahasa Inggris (TBI) fakultas Tarbiyah dan Ilmu Keguruan IAIN Padangsidimpuan, kama dengan ini kami mohon kepada Bapak/Ibu agar dapat menjadi Pembimbing Skripsi dan melakukan penyempurnaan judul bilamana perlu untuk mahasiswa dibawah ini dengan data sebagi berikut:

Nama	:	Nirmala Aini
NIM	:	13 340 0020
Sem./TahunAkademik	:	VII (Tujuh)/ 2015-2016
Fakultas/ Jurusan	:	Fakultas Tarbiyah dan Ilmu Keguruan/TBI-1
Judul Skripsi	:	**THE EFFECT OF PROBABLE PASSAGE STRATEGY ON STUDENTS' READING COMPREHENSION AT GRADE X SMA NEGERI 1 PANYABUNGAN SELATAN**

Demikian surat ini disampaikan, atas perhatian dan kesediaan Bapak/Ibu kami ucapkan terimakasih.

Ketua Jurusan TBI

Rayendriani Fahmei Lubis, M.Ag.
NIP.19710510 200003 2 001

Sekretaris Jurusan TBI

Fitri Rayani Siregar, M. Hum
NIP.19820731 2000912 2 004

Wakil Dekan Akademik

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

PERNYATAAN KESEDIAAN SEBAGAI PEMBIMBING

BERSEDIA/~~TIDAK BERSEDIA~~
PEMBIMBING I

BERSEDIA/TI~~DAK~~ BERSEDIA
PEMBIMBINGII