



**THE EFFECT OF INTENSIVE READING STRATEGY  
ON STUDENTS' READING COMPREHENSION  
AT GRADE VIII MTs N BATANGTORU**

**A THESIS**

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

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STATE INSTITUTE FOR ISLAMIC STUDIES  
PADANGSIDIMPUAN**

**2018**



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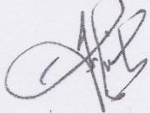
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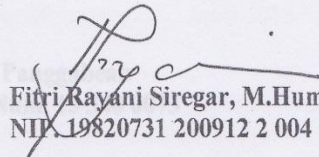
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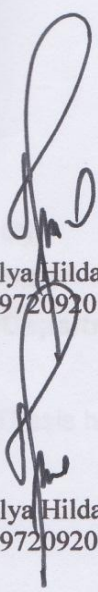
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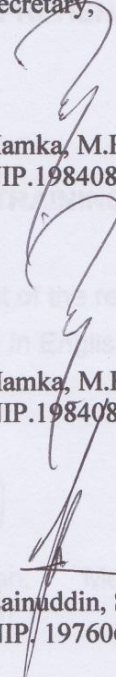
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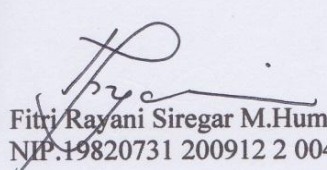
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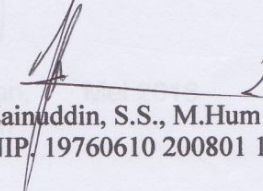
  
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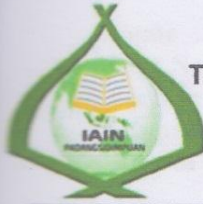
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### **ABSTRACT**

In this research, the researcher found that students' mark in reading comprehension was unsatisfied. The students' problem in reading comprehension were: 1) students' did not have enough vocabularies, 2) students did not have enough facilities, and 3) The students had low motivation in learning. Beside the students' problem, teacher's strategy also became a problem in learning reading. The teacher still used the conventional strategy in teaching reading comprehension. The purpose of this research was to examine the effect of Intensive Reading Strategy To the Students' on Reading Comprehension at Grade VIII MTs N Batangtoru.

The approach used in this research was experimental research where the researcher chosen two classes as the sample. They were VIII-1 as experimental class that consisted of 30 students and VIII-2 as control class that consisted of 30 students. In this research, the researcher gave pre-test and post-test in *multiple choices* form. Meanwhile, the data were derived from pre-test, and post-test. To analyze the data, the researcher used t-test formula.

After the data have been analyzed, the researcher found that there was the difference of mean score after using conventional strategy and Intensive Reading Strategy. Mean score after using conventional strategy in control class was 61.18 and mean score after using Intensive Reading strategy in experimental class was 85.9. The effect of intensive reading strategy on students' reading comprehension was 7.33 with  $t_0$  is higher than  $t_t$  ( $7.33 > 1.67155$ ). It means that there was a significant effect of intensive reading strategy on students' reading comprehension at grade VIII MTs N Batangtoru.

Key words: *Intensive Reading, Strategy, and Reading Comprehension*



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# CHAPTER I

## INTRODUCTION

### A. Background of the Problem

English is one of international language in the world. It is an important language which is studied by students at schools, colleges, and universities so they can communicate by using English. It is used by many people in the world. They use it not only for trade association but also for scientific terminologies. English mushroom in every part of the world and become a universal language because it is used by almost all countries, even in some countries have become the primary language of is become the standard language use in every life whether in goverment, social, and other formal institution.

English is as foreign language in Indonesia; it is not as a second language because Indonesian people do not use English as tool for daily communication. Actually, it is not only as the international language, but also as one of basic lesson at the curriculum of the study. So, English is studing at the school, from the junior high school up to the university.

In learning English, there are four skills in general. They are speaking, writing, reading and listening. Speaking is the ability to communicate orally to express feeling of idea. Then, writing is the ability to inventing ideas, thinking about how to express the students and organizing the them into statement and paragraph that will be clear to a reader. The third, listening is the ability to make sense of what they heard and to connect it in other information already to know.

The last, reading is the ability to get the messages or information that comes from the author that can be understood and comprehended by the reader easily.

Syllabus is The basic competences in learning English for junior high school in MTs N Batangtoru for reading. There are considered in learning English for reading skills. The first, reading perception based on functional meaning and simple essay from of recount and narrative with utterance, pressure and intonation acceptable in around circles. The second, responding meaning short text functional with accurate, fluent and acceptable in around circles. The last, responding meaning and rhetorical structure in simple short essay with accurate, fluent and acceptable with circles around in text from of recount and narrative.<sup>1</sup>In fact, the students do not reach the basic competence of reading based on the curriculum. The students cannot comprehend and understand the texts well; and they have many difficulties in understanding the conclusion from the text.

Reading is learning ways for students to enrich their knowledge because reading is the process of deriving meaning from text. With reading the reader can get information and knowledge because reading has a deriving process that makes the reader easy to get the writers' idea. Douglas Brown said that, "Reading is a process of negotiating meaning: the reader brings to the text a set of schema

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<sup>1</sup>*Syllabus* of MTs N Batangtoru

fo understanding it".<sup>2</sup> So, Reading is an activity to get information. Who is much read, he/she can get much knowing and don't leave information.

Based on interview with English teacher<sup>3</sup> it is known that there are some students' problem in reading. The first, students do not have enough many vocabularies; as known that vocabularies is one way to students to know what they read. Secondly, students do not have enough facilities; such as they have not text book in reading, facilities are very important to increase knowledge of students. The last, some students have low motivation in reading text book.

Mr. Torkis Nasution<sup>4</sup> said that he used conventional strategy, this uses teacher as facilitator and center of students activity, but many students are difficult to arrange sentence become text book about descriptive text using conventional strategy. This is another problem in MTs N Batangtoru. The researcher wants to introduce intensive reading as a strategy; Intensive reading is one from the strategy can be used by the teacher to ask students' to read

There are many strategy in reading comprehension as skimming, scanning, semantic mapping, oral reading, vocabulary analysis, distinguish between literal, outlining, silent reading, highlighting, extensive reading, intensive reading, PQRS, CRS, LRD and peer tutoring.

---

<sup>2</sup> H. Douglas Brown, *Language Assesment Principles & Classroom Practices*, (San Francisco State University, 2004), p. 189.

<sup>3</sup>Torkis Nasution as English Teacher at Grade VIII of MTs N Batangtoru, private interview at february 20<sup>th</sup>, 2017

<sup>4</sup>*Ibid*

Intensive reading is one of reading strategy it is the activity where the students read a descriptive text in detail to know every word meaning to get the real information on the text. Nuttall stated that, Intensive reading is for a high degree of comprehension and retention over a long period of time. The aim is to arrive at an understanding, not only of what the text means, but also of how the meaning is produce.<sup>5</sup> However, a personal classroom illustration is probably the best way to again and understanding of Intensive reading. The teacher will explain: how to get students to focus not just on the individual details but also comprehend the text more detail.

Based on corresponding to the above facts, the researcher is highly motivation in investigating the students' achievement in reading comprehension through intensive reading.

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

Based on the background of problems, the researcher identifying those students of grade VIII MTs N Batangtoru has many difficulties in reading comprehension, there are:

1. Students do not have enough vocabularies.
2. Students do not have enough facilities.
3. Students has low motivation in learning.
4. Students who can not comprehend the text

---

<sup>5</sup>Cristine Nuttall, *Teaching Reading Skills in a Foreign Language*. (London: The Niemen Education Ltd, 1982). P. 23

Based on explanation above, consist the problem number four, the problem might be occurred because most of students rarely read a text, they do not understand the use of consonant. It makes them very difficult to comprehend the text. On the other word, the strategy is used by the teachers less effective in teaching English. So that, the researcher offer to solve the problem by using intensive reading strategy in reading comprehension.

### **C. Limitation of the Problem**

Based on the identification of the problems above, the researcher limits the problem about the weakness of the students' in reading; then the strategy that they used conventional strategy. Then, the researcher wants to investigate the causal-effect relationship between intensive reading strategy on students' reading comprehension

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

The formulation of the problem are:

1. How was the students' reading comprehension at MTs N Batangtoru before using intensive reading strategy at grade VIII MTs N Batangtoru?
2. How was the students' reading Comprehension at MTs N Batangtoru after using Intensive Reading strategy at grade VIII MTs N Batangtoru?
3. Was there any significant effect of using intensive reading strategy at grade VIII MTs N Batangtoru?

### **E. Purposes of the Research**

The purposes of the research are:

1. To describe the students' Reading Comprehension before using intensive reading strategy at grade VIII MTs N Batangtoru.
2. To describe the students' Reading Comprehension after using intensive reading strategy at grade VIII MTs N Batangtoru.
3. To examine the significant effect of the intensive reading strategy on students' reading comprehension at grade VIII MTs N Batangtoru.

### **F. Significances of the Research**

The following illustration describes the significances of this research:

1. For headmaster, give support for English subject. Especially to prepare English Book for each students
2. For teacher, the result of this research will help the teacher to know about students' problem and improve students' comprehension. Also teacher must be change previous methode.
3. For students, as the motivation to improve their knowledge in comprehension the text.
4. For other researcher, the result of this research is to help the other researcher who will conduct further research in the same topic. so, researcher hopes this research can help other researcher as references and standing point for studying the other subject. This research can give them information about

teaching in reading skill, especially Intensive reading . It makes them easier in their research.

#### **G. Defenition of the Operational Variables**

The definitions of variables in this research are follows:

##### 1. Intensive Reading strategy as a variable X

Intensive reading strategy is reading text to take out the detail information, in which the students read whole the text or passage to get the certain information by understanding the semantic details and linguistic knowledge.

##### 2. Reading Comprehension as a variabel Y

Reading comprehension is the process to construct meaning from a text that is related to the elements of the reading comprehension, the activity to read the text that gives the information fo the reader.

#### **H. Outline of the Thesis**

The systematic of this research is divide into five chapters and each chapter has many sub-chapters with detail as follow:

Chapter I discuss about introduction, consist of background of the problem, identification of the problem, limitation of the problem, formulation of the problems, purposes of the research, significances of the research, definition of the operational variables, and outline of the thesis.

Chapter II contain about theoretical description, review of related finding, conceptual framework, and hypothesis.



Chapter III discuss about research methodology which is consist of research design, place and time of the research, population and sample, the instrument of collecting the data, research procedure, and technique of data analysis.

Chapter IV is the result of the research talking about the analysis of data. In thin chapter consist of description of data, hypothesis testing, discussion and threats of research.

Chapter V consist about conclusion the result of research and suggestion which is given to students and teacher by researcher.

## CHAPTER II

### THEORETICAL DESCRIPTION

#### A. Theoretical Descriptions

##### 1. Intensive Reading strategy

###### a. Defenition of Intensive Reading Strategy

Intensive reading is a kind of reading in which readers besides linguistic knowledge should understand semantic details and pay close attention to the text, because, the aim is to obtain certain information. It provides a basis for explaining difficulties of structure and for extending knowledge of vocabulary and idioms. This activity is likely more to emphasize the accuracy activity involving reading for detail. The process of scanning takes a more prominent role here than skimming. The reader is trying to absorb all the information.<sup>1</sup>Intensive reading is used to teach or practice specific reading strategy. In another hand, intensive reading involves a short reading passage follow by textbook activities to develop comprehension, particular reading skills and intensive reading is done in the classroom.

Intensive reading will provide a basis for explaining difficulties of structure and for extending knowledge of vocabulary and idioms. It will also provide material for developing greater control of the language in speech and

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<sup>1</sup>Cristine Nuttal, *Teaching Reading Skill in a Foreign Language*, (London: the Niemen Education Ltd, 1982), p. 23

writing. It will not only be read but also will be discussed in detail in the target language, sometimes analyze and use as a basis for writing exercises.<sup>2</sup>

At this stage, some teachers fall into the monotonous pattern of setting a section of reading material for homework preparation every night. Then they begin the lesson each day by asking student to translate what they have prepared, sentence by sentence around the class. Intensive reading is text reading or passage reading. In this reading the learners read the text to get knowledge or analysis. The goal of this reading is to read shorter text. This reading is carried out to get specific information.

According to Brown: Intensive reading activity is a usual classroom-oriented activity in which students focus on the linguistic or semantic detail of the passage. Intensive reading calls students' attention to grammatical form, discourse makers, and other surface structure details for the purpose of understanding literal meaning, implication, rhetorical, relationship and the like.<sup>3</sup>

Nuttall<sup>4</sup> said that Intensive reading is a kind of reading in which readers besides linguistic knowledge should understand semantic details and pay close attention to the text, because, the aim is to obtain certain information. It provides a basis for explaining difficulties of structure and for extending knowledge of vocabulary

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<sup>2</sup>Patel and Jain, *English Language Teaching: Methods, Tools, and Technique*. (New York: Sunrise Publisher and Distribution, 2008). P. 117.

<sup>3</sup>H. Douglas Brown, *Language Assessment*,..... p. 312

<sup>4</sup>Cristine Nuttall, *Teaching Reading Skills*..... (London: Heinemann Education Ltd, 1998). P. 198

and idioms. Reading complicate materials are generally use, and the rate of reading seems to be much lower than any other type of readings. Intensive reading is for a high degree of comprehension and retention over a long period of time. The aim is to arrive at an understanding, not only of what the text means, but also how the meaning is produced.

Further, Nation<sup>5</sup> stated that “Intensive reading involves the detail reading of texts with the two goals of understanding the text and learning language features through a deliberate focus on these items. The text chosen implies difficulty for the reader due to the content or the language”. The last defenition is from Scrivener<sup>6</sup> who stated that “intensive reading is typically used with short section or sentence when we need to understand or study information or language use in detail”. So, intensive reading strategy based on opinion above is the text usually use with short text, it can be the students’ comprehend information more detail and get the information more quickly.

Based on five defenition and explanation above, intensive reading is a reading to take out the spesific information. The aim of intensive reading is to arrive at a profound and detail understanding

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<sup>5</sup>Nation, H. 2004. *Vocabulary Reading and Intensive Reading*. EA journal, p. 20

<sup>6</sup> J. Scrivener, *Learning Teaching*. (The Bth Press: UK, 1994). P. 65

of the text; not only of what it means but also of how the meaning is produce. In intensive reading activities, learners are in the main expose to relatively short texts which are use either to exemplify specific aspects of the lexical, syntactic or discourse system of the second language or to provide the basis for targeted reading strategy practice.

#### **b. Characteristic of Intensive Reading Strategy**

Intensive reading strategy has characteristics. The characteristics of intensive reading can make students to read with concentration and great attention in order to understand exactly the meaning of the text. So they can use intensive reading as strategy in reading. Characteristics of intensive reading from Patel and Jain<sup>7</sup> there are:1) “This reading helps learner to develop active vocabulary, 2) Teacher plays main role in this reading, 3) Linguistics items are developed, 4) This reading aims at active use of language”.

First, this reading helps learner to develop active vocabulary. Most of pharagraph has vocabulary not only familiar vocabulary but also new vocabulary. In reading text book or pharagraph we must be

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<sup>7</sup> Patel and Jain, *English Language*,..... p. 118

have vocabulary it can be help us easy to read text. So, this reading helps the students to more active in vocabulary.

Second, teacher plays main role this reading, it means, in this case the role model in teaching is teacher, not only to teach but also to make the students more active in reading. The third, linguistics items are develop. Linguistics usually very important in teaching reading. Because, we can know how pronoun in reading. The last, this reading aims at active use of language. Language usually use in every moment activity. In reading also active with language, so the learners can read more focus.

There is other characteristic from intensive reading:

- a. usually classroom based
- b. reader isintensely involved in looking inside the text
- c. students focus on linguistic or semantic details of a reading
- d. students' focus on surface structure details such as grammar and discourse markers
- e. students' identify key vocabulary
- f. texts are read carefully and thoroughly, again and again
- g. aim is to build more language knowledge rather than simply practice the skill of reading
- h. seen more commonly than extensive reading inclassrooms.<sup>8</sup>

Based on explanation above the characteristic of intensive reading is the reader more intensively involved inside the text,

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<sup>8</sup>Paran, A Intensive Reading. English Teaching Professional retrieved from <http://www.///C:/Users/User /Downloads/Documents/09a.mart.pdf>, on oktober 29<sup>th</sup> 2017 at 09.40 pm.

students can identify key vocabulary in text and intensive reading seen more commonly than extensive reading in classroom.

### c. Advantage and Disadvantage of Intensive Reading Strategy

When using intensive reading strategy, the presenter should be aware of the following advantage and disadvantages. Intensive reading strategy is a good strategy can be applied in reading comprehension. The use of intensive reading strategy in reading comprehension gives some advantages, they are:

- 1) For low level readers; Fastest way to build vocabulary.
- 2) It provides with a short concept of other customs and places.
- 3) It provides a base for students to develop a greater control of language
- 4) It provides for a check on the degree of comprehension for individual students.<sup>9</sup>

Based on explanation above advantages of intensive reading strategy are that it focuses the learner on certain aspects of the language. However, intensive reading is usually done with difficult texts with many unknown words that require the learner to use a dictionary. This means the reading is slow and that there are few opportunities for the learner to learn to read smoothly, because

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<sup>9</sup>Akiko Tamura, The Advantages of the Transition from Intensive Reading to Extensive Reading Based on my experience of the Restudy of English retrieved from <http://www.google.co.id/url?q=http://www.kushoro-ct.ac.jp/library/kiyo/kiyo49/13tamura.pdf> on november 10<sup>th</sup> 2017 at 10.20 p.m



she/he has to stop every few seconds to work on something she/he can't understand.

Intensive reading strategy is a good strategy can be applied in reading comprehension. The use of intensive reading strategy in reading comprehension gives some disadvantages, they are:

- 1) There is little actual practice of reading because of the small amount of text.
- 2) In a class with multi-reading abilities, students may not be able to read at their own level because everyone in the class is reading the same material..
- 3) The text may or may not interest the reader because it was chosen by the teacher.
- 4) There is little chance to learn language patterns due to the small amount of text.
- 5) Because exercises and assessment usually follow intensive reading, students may come to associate reading with testing and not pleasure.<sup>10</sup>

Based on explanation, disadvantages of intensive reading strategy are have short text and the text chosen by teacher. So, the students may not interest with the text.

#### **d. Procedures of Intensive Reading**

Teaching is the process of attending. People's needs experiences and feelings, making specific interventions to help them learn particular thing. Intensive reading strategy have procedure in teaching learning, the produre of intensive reading are:

- a. Prediction of the content of the paragraph before reading it;

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<sup>10</sup>*Ibid*, p. 12

- b. Making questions focusing on the main idea of the paragraph;
- c. Summarizing what has just been read; and
- d. Seeking clarification on difficult points in the paragraph.<sup>11</sup>

In addition procedure of intensive reading above, There are four intensive reading teaching:

1) Predicting

At the beginning, students and teacher see the aspects for instance the title of the story, the introduction, and heading. After that, teacher let the students activate the prior knowledge to predict about the text. The students are encouraged to speculate freely what the reading text might discuss. In other words, teacher initially about the title and the teacher had the students reveal prediction about it. They determine what is going to happen next on a literal or inferential level or what will be the view point of the author in the next section.

2) Question.

Students read silently in order to know the main idea of the paragraph. After reading, students generate questions they have and then they formulate about the unclear section of this paragraph. Students at that time should formulate the question about the content to make sure whether the students understand about the text or not.

3) Clarifying

This process assists students with a history of comprehension difficulties by having them focus their attention on the text. Clarification can range from word definitions to understand complex terminology or processes. Teacher and students find out the answer in the text, what the students can not understand. The participation between teacher and student seek clarification during the group discussion to ensure the reader engage with the text.

4) Summarize

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<sup>11</sup>Indah Fuji Lestari. 2010. Improving Reading Comprehension Through Intensive Reading Technique retrieved from [http://C:/Users/User/Downloads/Documents/THESIS2\\_2.pdf](http://C:/Users/User/Downloads/Documents/THESIS2_2.pdf), on September 23<sup>th</sup> 2017 at 10.15 a.m

The last step is the teacher asks the students about the key elements of the story or text. Multiple students participate in this process requiring the students to recall and reorganize the text. Here, the students point out the main focus of the text.<sup>12</sup>

Based on explanation above, the procedure of intensive reading teaching are: the first is predicting, predicting is the students and teacher see the aspects for instance the title of the text, and the teacher introduction to the students about the text. The second is question, question is students read silently in order to know the main idea from the text. Then, clarifying is the process assists students with a text and comprehending the difficulties by having them focus their attention. The last summarize, summarize is the students and the teacher together to get the point out the main focus of the text.

## **2. Reading comprehension**

### **a. Defenition of Reading Comprehension**

The major concern about reading is not how to ensure that the students to read but how to ensure that the students will continiou to read increase students reading comprehension. Reading comprehension is important for the students to become effective reader. According to Mayer, “Reading comprehension is technique for improving students in extracting useful knowledge from the

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<sup>12</sup> Ni Putu Sri Indrawati retrieved from (<http://unmaslibrary.ac.id/wpcontent/uploads/2014/11/THESIS2.pdf>) on September<sup>th</sup> 2017 at 09.30

text”.<sup>13</sup> In other word, reading comprehension is ability of the reader to understand the text and comprehend the mean of the text and understanding a text that is read or process of constructing meaning from the text.

Reading comprehension is way to get the idea from the text. comprehension the text can be seen from evaluation with students’ knowledge. According to Goodman in Otto that “Reading comprehension is an interaction between thought and language and bases evaluation of success in comprehension on the extent to which the readers’ reconstruct message agrees with the writers’ intend message”.<sup>14</sup> It means that reading comprehension not only understands the text, but also the reader must reconsturc message what the writer grafts in a text. furthermore, Malley indicates “reading comprehension is knowledge about the words as well as on knowledge of language or print”.<sup>15</sup> It means that to preduce literal reading comprehension it entails making inferences and evaluating what is read.

Then, reading comprehension means the ability to connect new information with background of knowledge. Tarigan gives the

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<sup>13</sup> Mayer, *Learning and Instruction*, (New Jersey: Person education, 2003), p. 34.

<sup>14</sup> Wayne Otto, et. al., *How to Teaching Reading* (Philippines: Addison-Wesley Publishing Company, 1979), p. 151.

<sup>15</sup> J. Michael O’Malley and Lorraine Valdez Pierce, *Authentic Assessment for English Language Learners* (American: Addison-Wesley publishing Company, 1996), p. 94.

definition of reading comprehension; it is reading activity that interpreting the experience in connecting new information with the prior knowledge, and also to answer the cognitive questions.<sup>16</sup> Research has shown a consistent positive and mutually supportive, relationship prior knowledge and reading comprehension.

Based on explanation above, the resercher can conclude that reading comprehension is how to comprehend a written material that containing some information to find what the readers want to know and also the information they need. Reading and comprehension cannot be separate, because readers need comprehension to get the information from a text. it means that reading without comprehension is nonsense.

#### **b. Types of Reading**

Depending on the purposes of reading can be classify into four types of activity:

##### 1) Perceptive reading

In keeping with the set of categories specify for listening comprehension, similiar specifications are offer here, except with some differing terminology to capture the unuqueness of reading. Perceptive reading tasks involve attending to the components larger stretches of discourse: letter, words,

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<sup>16</sup> Henry Guntur Tarigan, *Membaca Sebagai,....* p. 43

punctuation, and other grapheme symbols. Bottom-up processing is imply.

2) Selective reading

This category is largely an artifact of assessment formats. In order to ascertain one's reading recognition of lexical, grammatical, or discourse features of language within a very short stretch of language, certain, typical tasks are use: picture-cued tasks, matching, true/false, multiple choose, stimuli include sentences, brief paragraphs, and simple charts and graphs.

3) Interactive reading

Include among interactive reading types are stretches of language of several paragraphs to one page or more in which the reader must, in a psycholinguistic sense, interact with the text.

4) Extensive reading

Extensive reading can be contrasted with intensive reading. Extensive reading means reading many books without a focus on classroom exercises that may test comprehension skills.<sup>17</sup>

The idea behind extensive reading is that a lot of reading of

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<sup>17</sup> David Nunan, *Practical English Language Teaching*, (New York: McGraw-Hill Companies, 2003), p.71

interesting material that is slightly below, or barely above the full comprehension level of the reader will foster improve language skills.

In extensive, reading students usually read to understand the general meaning of the passage or the theory and do not pay a lot of attention to details in the reading materials. Students are ask to read short passage in the class and pay a lot of attention to details (vocabulary and grammar). There are usually some activities that should be done after the reading (answering question and sentence complete).

Furthermore, extensive reading usually means reading many self-selected easy, interesting texts, and doing few or exercises afterwards. Extensive reading is order to gain a general understanding of what is read. It is intend to develop good reading habits, to build up knowledge of vocabulary, structure, and encourage a liking for reading such as any interest books, magazines and news paper reading.

The conclude of types of reading must know perceptive, selective, intensive and extensive with details and use in the texts.



### c. Levels of Reading Comprehension

Reading comprehension does not only know what text is about, but also reading comprehension demands the students to have deep understanding about all of the text. moreover, the comprehension of the text involves the knowledge of vocabulary, structure, and also situation or condition in which language use.

Smith in Wayne Otto indicates that there are four levels of comprehension:

1) Literal comprehension

Literal comprehension is generally accept as the most simple, basic, comprehension skills, and one that requires little thinking or reasoning.

2) Interpretation

Definitely involves thinking skill and readers requires to identify ideas and meaning that are not state in the written text within the interpretive level, the form of language in a literature. So, it is easy to understand content and to differ between origin language and literary language, the reader may make generalization determine clause and affect, identify motives, find relationship, predict ending, and make comparison.

3) Critical reading

When individuals read critically they evaluate what they read, that is way, they examine, critically through of the writer, which has identify through the two lower levels of comprehension and judge their validity of worth.

4) Creative reading

Creative reading going beyond what the author has written applying ideas from the text to new situation and recombining the author ideas to form new concept or to expend add ones, through creative reading reader creates something new idea, the solution to a problem, and a new

way of looking at something from the ideas glean from the text.<sup>18</sup>

Based on explanation above, it can be concluded that there are four levels of comprehension, they are literal comprehension, interpretation comprehension, and critical reading and the last is creative thinking. Literal comprehension is comprehension skill to require little thinking. Interpretation is thinking skill to identify ideas of the text. Then, critical reading is ability to evaluate what reader read. The last, creative reading is creates new idea, and take solution for problem.

#### **d. Reading Roals**

The main goals of reading are to get and search information include content and meaning of the text.<sup>19</sup> Here some goals of reading such as:

- 1) Reading is to find the topic of the text.
- 2) Reading is for identifying important information.
- 3) Reading is for main ideas.
- 4) Reading is for finding the spesific information.
- 5) Reading is for underlining the important information
- 6) Reading is to classify the difficult word.
- 7) Reading is to evaluate.

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<sup>18</sup> Wayne Otto, et al, *How to Teaching*,..... p. 152-153

<sup>19</sup> Henry Guntur Tarigan, *Membaca Sebagai*,..... p. 6

In conclusion, the goals of reading are to easier the reader in read the text, to find the topic of the text and how to evaluate of the text. the researcher give the indicator of reading test, there were able to find the meaning of underlining word, able to find the topic sentences of the text, able to identify main idea from the text, able to identify important information of the text.

According to River and Temperly in David Nunan book suggest that there are seven the goals of reading:

1. To obtain information for some purpose or because we are curious about some topic.
2. To obtain instructions on how to perform some task for our work or daily life (Examples, knowing how an appliance works).
3. To act in a play, play a game, do a puzzle.
4. To keep in touch with friends by correspondence or to understand business letters.
5. To know when or where something will take place or what is available.
6. To know what is happening or has happened (as reported in newspaper, megazine, reports, etc).
7. For enjoyment or excitement.<sup>20</sup>

From the explanation above, the researcher concluded that goals of reading comprehension that a lot and have a goal that is very important because a lot of new information can be obtained as to add knowledge, either from text books, newspapers, and megazines. The indicators of reading comprehension are how to

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<sup>20</sup> David Nunan, *Practical English Language Teaching*, (New York: McGraw-Hill, 2003). P.251

identify main ideas, topic sentences, expression/idioms/phrases in context, inference (implied detail), grammatical features, detail (scanning for a specifically stated detail), excluding facts not written (unstated details), important information, supporting ideas and vocabulary in context.<sup>21</sup> Finally, the researcher chooses for these researches are identifying main idea, a general overview of the text, important information, the pupose of communication, vocabulary in context (underlining word).

#### e. **Assessment of Reading Comprehension**

Assessment is a tool to measure how far the students ability and comprehension of material. Reading comprehension has some indicators. The indicators are students able to:

- 1) Identify the topic from the text.
- 2) Identify main idea from the text.
- 3) Identify information that needed from the text.
- 4) Give conclusions from the text.
- 5) Understand the vocabulary from the text. :<sup>22</sup>

There are some techniques to test reading comprehension, they are: multiple choice questions (MCOs), short answer questions, cloze, etc. So, researcher choose multiple choice question. Multiple choice test item is usually set out in such a way

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<sup>21</sup> H. Douglas Brown, *Language Assessment: Principles and Classroom Practices*, (Pearson Longman: San Francisco State University, 2004), p. 206.

<sup>22</sup>*Ibid*

that the candidate is required to select the answer from a number of given options. The answer is only one of which is correct

## B. Review of Related Findings

There are some findings related to this research. The First is Ni Putu Sri Indrawati<sup>23</sup> All of the students seventh grade in the SMPN 4 Denpasar got the pre-test score under 75 points. In the post test, 10 from the seventh grade students of SMPN 4 Denpasar could pass in the post-test because they got score more than 75 points of the minimum score. Than 39 of the seventh grade students could not pass in the post-test. The mean of the post-test are 77.41, the mean of the pre-test score are 45. in post-test the students got score more than 75 points of the minimum score.

The second is from Yeni Afriyeni<sup>24</sup> the researcher got the result from this reseach in mean score of pre-test o experimental group was 47.6. That use intensive reading an improve the ability of the students. It can be seen from the avarage of reasults study from 47.6 in pre-test, 72 in cylcle 1 and 77 in cycle 2. Any 3 factor it can be influence result of the students; learning,

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<sup>23</sup> Ni Putu Sri Indrawati, The Implementation of Intensive Reading technique to Improve Reading Comprehension at seventh grade retrieved from <http://unmas-library.ac.id/wp-content/uploads/2014/11/THESIS2.pdf>, on Mei 15<sup>th</sup> 2017 at 09.20 a.m.

<sup>24</sup>Yeni Afriyeni, the effect of students' reading comprehension by using intensive reading comprehension retrieved from <http://www.geogle.co.id/url?q=http://ejournal.unp.ac.id/index.php/elt/article/download/459/3631> on januari 28<sup>th</sup> 2018 at 07.49 a.m.

lesson and test evaluation. After used intensive reading strategy in pot-test yeni got result 34.57.

The last researcher is from Muhammad Ali Erfanpour<sup>25</sup>. Muhammad do his research in Iranian high school, the researcher got the result in pre-test 18.77 in post-test the reseracher got result 78. After using intensive strategy the resul higher was 85.9. So, in this researcher found significant effect it can be seen from result  $t_0$  is higher than  $t_t$  ( $4.62 > 2.00$ ).

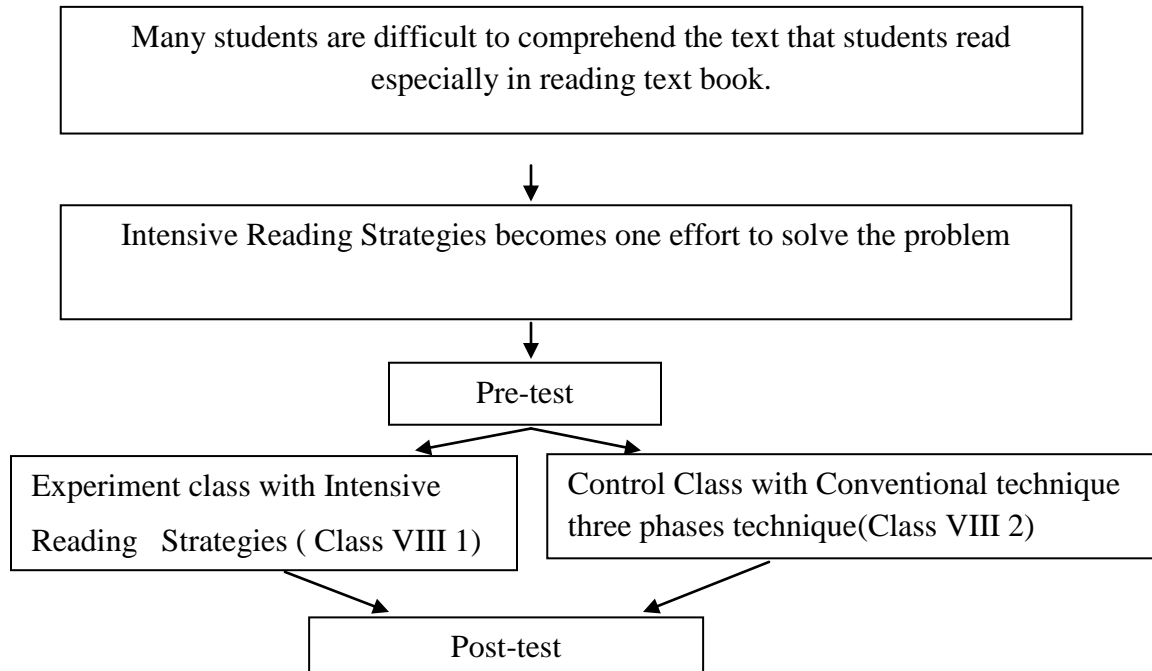
Based on third researcher above, researcher has inspiration to do a research about the effect of Intensive Reading strategy to the Students at Grade VIII MTs N Batangtoru. The research wants to know the causal-effect relationship between Intensive Reading in reading descriptive text.

### C. Conceptual Framework

The succesful of reading comprehension depend on many factors. One of them is how the teacher teaches reading to the students. The suitable strategy is vey important to teach reading. So, the students must have the reading. reading is the that used while the students read the material. So, they can more easily to understand and comprehen the material. Intensive reading is one of the strategy in reading. The relation of intensive reading on reading news item text could see as follow:

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<sup>25</sup>Muhammad Ali Erfanpour, The Effect of Intensive and Extensive reading Strategies on Reading Comprehension: a case of Iranian high school students', retrieved from <http:file:///C:/Users/User/Downloads/Documents/Erfanpour.pdf>, on Februari 26<sup>th</sup> 2018 at 11:55 am.



#### D. Hypotheses

The hypothesis of this research stated that:

$H_a$ : There is a significant effect of using Intensive Reading to students reading comprehension at grade VIII MTs N Batangtoru.

$H_o$ : There is no significant effect of using using Intensive Reading to students reading comprehension at grade VIII MTs N Batangtoru.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

#### **A. Research Methodology**

##### 1. Time and Location of Research

The location of this research is MTs N Batangtoru. It is located at Jl. Padangsidimpunan-Sibolga, Kampung Telo. Kec. Batangtoru. This research had been done from Juni 2017 up to Maret 2018.

##### 2. Method of the Research

The method of the research is experimental method. It is a kind of method use in research and based on analysis of data, this research is a quantitative approach. It is a kind of research which has the aim to know causal effect relationship between one variable and more to other variables.

In this research, the researcher used two classes, as experiment class and as a control class. The experiment class is the class that taught with Intensive Reading or new strategy but in control class use three phases technique. It can be seen from the table



**Table 1**  
Design instrument

Class	Pre-test	Treatment	Post-test
Experiment class	Pre Test	Teaching reading text book by using Intensive Reading	Post Test
Control Class	Pre Test	Teaching reading text book by using conventional strategy	Post Test

## B. Population and Sample

### 1. Population

Ibnu Hadjar stated that population is the big group of individual that have the same general characteristics.<sup>1</sup> Population of this research was grade VIII students at MTs N Batangtoru academic year 2017/2018. Present as follows:

**Table 2**  
Population of Grade VIII students of MTs N Batangtoru

No	Class	Total Students
1	VIII-1	30
2	VIII-2	30
3	VIII-3	24
4	VIII-4	32
5	VIII-5	30
6	VIII-6	27
TOTAL		173

Sources : School Administration data of MTs N Batangtoru

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<sup>1</sup>Ibnu Hadjar, *Dasar-Dasar Metodologi Penelitian Kuantitatif dalam Pendidikan*, Jakarta: PT Raja Grafindo Persada, 1999, p. 133

## 2. Sample

Sample are part of population. Sample are process selecting a number of individuals for a study or research from large group or population are selected.

There were four different sampling techniques were include in the probability sampling technique. The fourth technique are random, stratified, cluster and systematic. The researcher used random sampling. Random sampling is the process of selecting a sample in such a way that all individuals in the defined population have an equal and independent chance of being selected for the sample.<sup>2</sup> It means random sampling is suitable to get sample in this research.

In this research, the researcher chose two classes as a sample. The classes were VIII-1 as experimental class and VIII-2 as control class. For VIII-1 class as experimental class, they had been taught by using intensive reading strategy and VIII-2 class as control class had been taught by using conventional strategy. Furthermore, the researcher look how far the effect of intensive reading strategy to find out students' reading comprehension.

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<sup>2</sup> L. R. Gay and peter Airisian, *Educational Research: Competences for Analysis and Application, Sixth Edition*, (USA: Prentice Hall, Inc., 2000), p. 367

Before using random sampling. First, the researcher used normality and homogeneity test. Normality test is used to know whether the data of research is normal or not. To know the normality, the researcher use *Chi-Quadrate* formula. The formula is as follow:<sup>3</sup>

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

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.

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 3 ( $dk = k - 3$ ). If result  $x^2_{count} < x^2_{table}$ . So, it can be concluded that data is distributed normal.

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

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<sup>3</sup>Anas Sudijono, *Pengantar Statistik Pendidikan*. (Jakarta: PT. Raja Grafindo Persada. 2005), p. 298.

same, it can be called homogenous. To find the homogeneity, the researcher use *Harley test*. The formula is as follow:<sup>4</sup>

$$F = \frac{\text{Thebiggestvariant}}{\text{Thesmallestvariant}}$$

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

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

Hypothesis is rejected if  $F \leq F_{\frac{1}{2}} \alpha(n_1-1)$  ( $1= n_2-1$ ), 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  $(n_2-1)$ .

Based on explanation above, to know the normality and homogeneity of the sample, the researcher had given the pre-test to the three classes (VIII 1 and VIII 2). After calculated the data, the researcher had found that theree classes were homogenous. So, the researcher chose two classes as a sample. They were VIII-1 and VIII-2 . VIII-1 class consisted of 30 students' and VIII-2 class consisted of 30 students.

**Table 3**  
The Sample of Students MTs N Batangtoru

Experimen Class	Control Class	Total
VIII-1	VIII-2	60

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<sup>4</sup>Agus Irianto, *Statistik Konsep Dasar dan Aplikasinya*. (Padang: P2LPTK Departemen Pendidikan Nasional. 2003), p. 276

### C. Instrument of the Research

A research must have an instrument because a good instrument can guarantee for taking the valid data. In this study, the instrument for collecting data chooses has test. Test is sequence of question or practice that will be used for surveying the skill, intelligence knowledge, ability or trait that is owned by individual or group. In this research used multiple choice tests.<sup>5</sup> The multiple choice test consists of four opinion, a, b, c, and d. The researcher used students as sample. In doing test, the researcher used reading strategy. In this research, the researcher are just an observer sample then controls all the students when doing this test and the students involve this research.

The researcher choose reading comprehension test to take the data. The test consisted of 50 questions before validity test, 25 questions for pre-test and 25 questions for post-test. After validity the test consisted become 40 questions, 20 for pre-test and 20 for post-test. For pre test, they are 4 tests for finding the topics of the text, 4 test for identify important information of the text, 4 test for identifying main idea of the text, test for find the meaning of underlining word. While for post test, they are 4 test for finding the topics of the text, 4 tests for identify important information of the text, 8 test for identifying main idea of the text, 4 tests for find the meaning of underlining

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<sup>5</sup> Linda Wong, *Essential Study Skills Sixth Edition*, (Boston & New York: Houghton Mifflin Company, 2009), p. 348.

word. Then, tests give the both classes. To find out the scores of the students answer, the researcher give 4 score for each item. Thus maximum score of the test is 100. It can be seen in the following tables:

**Table 4**  
**The indicator of Reading Comprehension for Pre-Test& Post-Test**

No	Indicators of reading comprehension	Items	Number of items	Score	Total Score
1	Get the main idea of a text	4	1,5, 9, 13, 17	4	25
2	A general overview of the text	7	2, 6, 10,14, 18	4	25
3	The information that message from the text	6	3, 7, 11, 15, 19	4	25
4	The purpose of communication of the text	8	4, 8, 12,16, 20	4	25
TOTAL		20	20		100

No	Indicators of reading comprehension	Items	Number of items	Score	Total Score
1	Get the main idea of a text	5	1,5, 9, 13, 17	4	25
2	A general overview of the text	5	2, 6, 10,14, 18	4	25
3	The information that message from the text	5	3, 7, 11, 15, 19	4	25
4	The purpose of communication of the text	5	4, 8, 12,16, 20	4	25
TOTAL		20	20		100

From the indicator above, the researcher gave the reading test to students either for post test and pre test. The experiment class and the

control class give some materials, which experiment class by using intensive reading strategy and control class without intensive reading strategy then, the students are given test based on indicator above.

#### D. Validity and Reability Instrument

##### 1. Validity

In this research, the researcher used item validity to get the validity of instrumentation. Item validity is a part of the test as a totality to measure the test by items. Then, the test consists of 40 multiple choice that divided in to two groups. They were 20 for pre-test and 20 for post-test.

To get the validity of the each question had used to list  $r_{berisial}$  with  $r_{tin}$  5% significant: 0.361 and 1 % significant: 0,463. So, if  $r_{count} > r_{table}$  the test is classified valid.

To get the validity of the test, the formula of  $r_{pointbeserial}$  can be used as follow:

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

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.<sup>6</sup>

## 2. Reliability

Reliability is the extent to which measuring device is consistent in measuring whatever it measures. It refers to the consistency of measurement that is to how consistent scores or other evaluation results are from one measurement to another. To get the reliability of the test, the researcher uses formula K-R-20.<sup>7</sup>

The formula:

$$R_{11} = \left( \frac{n}{n-1} \right) \left( \frac{S_t^2 - \sum pq}{S_t^2} \right)$$

In Which:

R : Reliability of the Instrument

n : Number of the Test

$S_t^2$  : Variants total

P : Proportion subject who is right answer (1)

q : Proportion subject who is wrong answer (0)

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<sup>6</sup>AnasSudijono, *PengantarStatistikPendidikan*, (Jakarta: Raja GrafindoPersada,2008), p.258.

<sup>7</sup> Suharsimi Arikunto, *Prosedur.....*, p.188.



## **E. Procedures of Data Collection**

In completing the data, the researcher continue to the next step. The next step is collecting the data. The function of data collecting is to determine the result of the research. In collecting data the researcher used some steps. They are:

### **1. Pre test**

- a. The researcher prepared the test 20 items.
- b. The researcher distributed the paper of the test to students of experimental class and control class.
- c. The researcher explains what students to do.
- d. Gives time to do.
- e. The students answered the question.
- f. Collected their paper test to researcher.
- g. The researcher checked the answer of students and found the mean score of control and experimental class.

### **2. Treatment**

The experimental class and the control class are give some material, which is consists of intensive reading strategy on students' reading comprehension aspects that is taught by the researcher in different ways. The experimental class is give treatment taught by using intensive reading strategy and the control class in taught by the using conventional strategy.

### **3. Post test**

After giving treatment, the researcher conducts a post-test which the different test with the pre-test, and has not been conducted in the previous of the research. This post-test is the final test in the research, especially measuring the treatment, whether is an effect or not. The researcher has some procedure. There are:

- a. The researcher prepared the test 20 items.
- b. The researcher distributed the paper of the test to students of experimental class and control class.
- c. The researcher explains what students to do.
- d. Gives time to do.
- e. The students answered the question.
- f. Collected their paper test to researcher.
- g. The researcher checked the answer of students and found the mean score of control and experimental class.

### **F. Techique of Analyzing Data**

The techniques of analyzing data that use by the research are:

#### **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  $5 \times 20 = 100$
- c. Maximal score =  $\frac{\text{totaloftrueanswer}}{\text{totalof test}}$

## 2. Requirement test

### a. Normality Test

To know the normality, the researcher used Chi-Quadrate formula. The formula 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.

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 3 ( $dk = k - 3$ ). If result  $x^2_{\text{count}} < x^2_{\text{table}}$ . So, it can be concluded that data is distributed normal.

## b. Homogeneity Test

Homogeneity test is used to know whether control class and experimental class have the same variant or not. If both classes are same, it can be called homogenous. To find the homogeneity, the researcher use *Harley test*. The formula is as follow:<sup>8</sup>

$$F = \frac{\text{Thebiggestvariant}}{\text{Thesmallestvariant}}$$

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

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

Hypothesis is rejected if  $F \leq F_{\frac{1}{2} \alpha (n_1-1) (1= n_2-1)}$ , 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  $(n_2-1)$ .

Based on above explanation, to know the normality and homogeneity of the sample, the researcher will give the pre-test to the class that similar ability in English.

## 3. Hypothesis Test

The hypothesis test is used by t-test, because is aim to examine the difference of two variables. Such examination perform both on pre-test and

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<sup>8</sup>Agus Irianto, *Statistik Konsep Dasar dan Aplikasinya*. Jakarta: Kencana, 2009, p. 276

post-test score from the experimental class and control class. T-test formula apply is as follows:<sup>9</sup>

$$Tt = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{n_1 + n_2 - 2}\right) \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Where:

- T : The value which the statistical significance
- M<sub>1</sub> : The average score of the experimental class
- M<sub>s2</sub> : The average score of the control class
- X<sub>1</sub><sup>2</sup> : Deviation of the experimental class
- X<sub>2</sub><sup>2</sup> : Deviation of the control class
- n<sub>1</sub> : Number of experimental
- n<sub>2</sub> : Number of control

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<sup>9</sup> Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktek Edisi Revisi II*, (Jakarta: Rineka Cipta, 1993), p. 269.

**CHAPTER IV**  
**DATA ANALYSIS**

As mentioned in earlier chapter, in order to evaluate the effect of using intensive reading strategy, the researcher has calculated the data using pre-test and post-test in the both classes. 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 Intensive Reading 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 6**  
**The Score of Experimental Class in Pre-test**

Total	1350
Highest score	75
Lowest score	30
Mean	53
Median	57.5
Modus	55.5
Range	45
Interval	8
Standard deviation	12.64
Variants	172.41

Based on the above table the total score of experiment class in pre-test was 1350, mean was 53, standard deviation was 12.64, varians was 172.41, median was 57.5, range was 45, modus was 55.5, interval was 8. The researcher got the highest score was 75 and the lowest score was 30. 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 7**  
**Frequency Distribution of Students' Score**

No	Interval	Mid Point	Frequency	Percentages
1	30 – 37	33	10	33.33%
2	38 – 45	41	9	30%
3	46 – 53	49	4	13.33%
4	54 – 61	<b>57</b>	3	10%
5	62 – 69	65	1	3.33%
6	70 – 78	74	3	10%
$i = 8$		–	30	100%

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

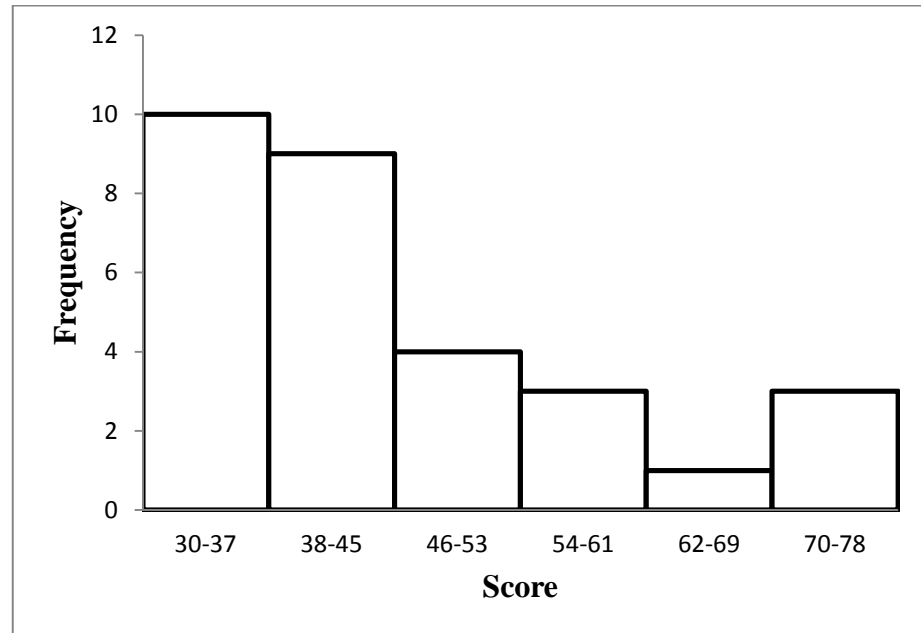


Figure 1: Description Data Pre-Test of Experimental Class

From the histogram above, the students' score 30 up to 37 was 10; 38 up to 45 was 9; 46 up to 53 was 4; 54 up to 61 was 3; 62 up to 69 was 1; 70 up to 78 was 3. Then, the score had most frequent was 30 – 37 and the score had lowest frequent was 62 – 69.

#### **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 8**  
**The Score of Control Class in Pre-test**

Total	1360
Highest score	80
Lowest score	25
Mean	49.7
Median	49.7
Modus	42.4
Range	55
Interval	9
Standard deviation	13.32
Variants	189.54

Based on the above table the total score of experiment class in pre-test was 1360, mean was 49.7, standard deviation was 13.32, varians was 189.54, median was 49.7, range was 55, modus was 42.4, interval was 9. The researcher got the highest score was 80 and the lowest score was 25. 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 9**  
**Frequency Distribution of Students' Score**

No	Interval	Mid Point	Frequency	Percentages
1	25 – 33	29	7	23.33%
2	34 – 42	38	8	26.66%
3	43 – 51	47	8	26.66%
4	52 – 60	56	4	13.33%
5	61 – 69	65	1	3.33%
6	70 – 78	74	1	3.33%
7	79 – 87	83	1	3.33%
i = 9		–	30	100%

From the table above, the students' score in class interval between 25 – 33 was 7 students (23.33%), class interval between 34 – 42 was 8 students (26.66%), class interval between 43 – 51 was 8 students (26.66%), class interval between 52 – 60 was 4 students (13.33 %), class interval between 61 – 69 was 1 students (3.33 %), class interval between 70 – 78 was 1 students (3.33 %), and the last class interval between 79 – 87 was 1 students (3.33 %).

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

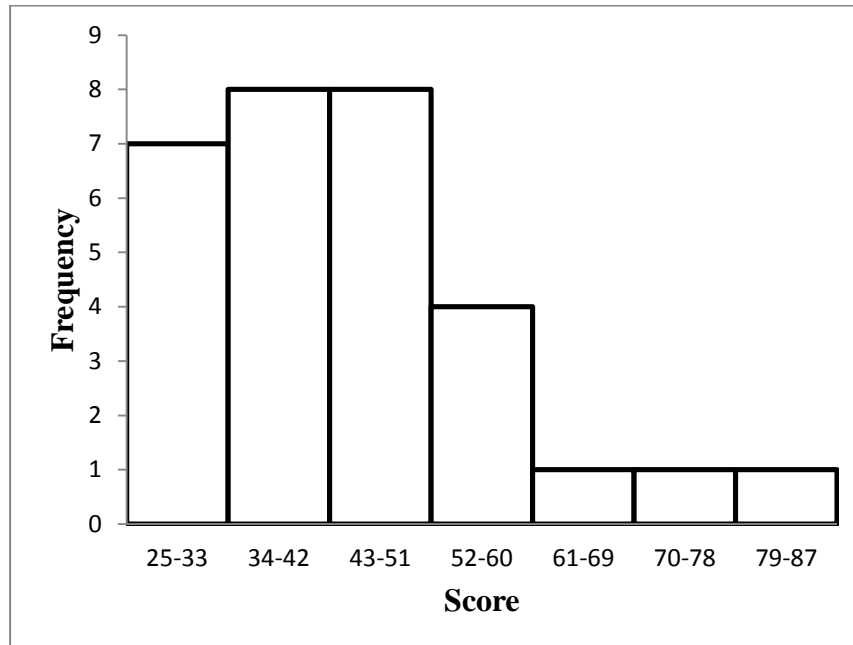
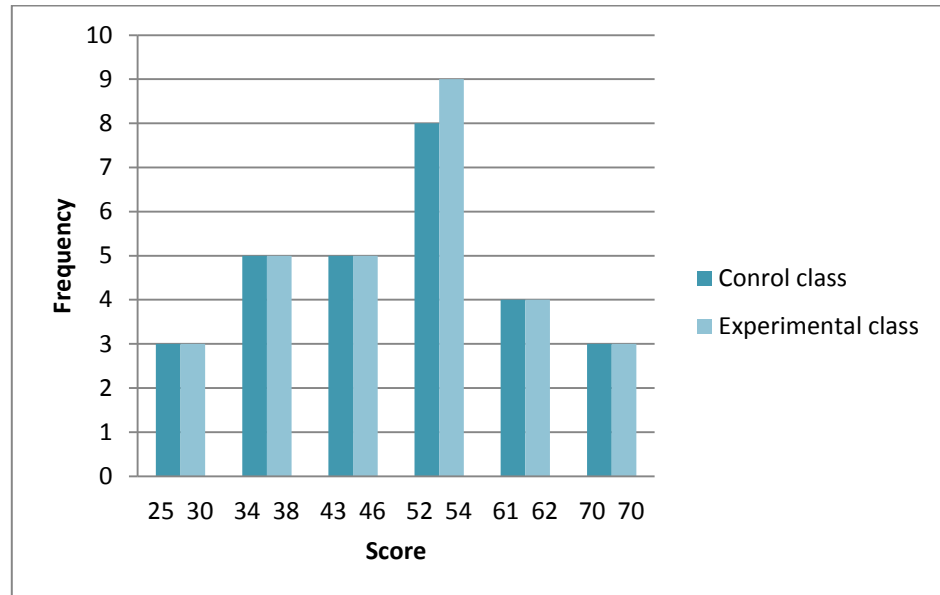


Figure 2: Description Data Pre-Test of Control Class

From the histogram above, the students' score 25 up to 33 was 7 students, the students' score 34 up to 42 was 8 students, the students' score 43 up to 51 was 8 students, the students' score 52 up to 60 was 4 students, the students' score 61 up to 69 was 1 student, the students' score 70 up to 78 was 1 student, and the last student's score 79 up to 87 was 1 student.

**c. 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 3: Description Data Pre-Test of Control Class and Experimental Class**

From the histogram above, the students' scores of experimental class was higher than the students' scores of control class.

## **2. Description of Data After Using Intensive Reading**

### **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 intensive reading strategy. The score of post-test experimental class can be seen in the following table:

**Table 10**  
**The Score of Experimental Class in Post-test**

Total	2280
Highest score	90
Lowest score	50
Mean	85.9
Median	79.81
Modus	82.16
Range	40
Interval	7
Standard deviation	11.13
Variants	133.44

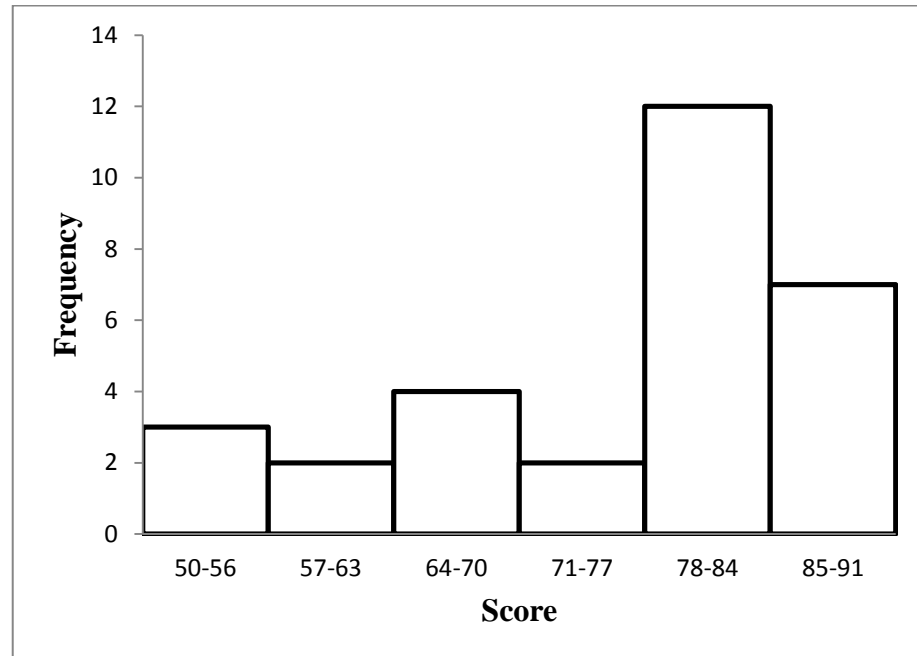
Based on the above table the total score of experiment class in post-test was 2280, mean was 85.9, standard deviation was 11.13, varians was 133.44, median was 79.81, range was 40, modus was 82.16, interval was 7. The researcher got the highest score was 90 and the lowest score was 50. It can be seen on appendix 20. Then, the computed of the frequency distribution of the students' score of experiment class can be applied into table frequency distribution as follow:

**Table 11**  
**Frequency Distribution of Students' Score**

No	Interval	Mid Point	Frequency	Percentages
1	50 – 56	53	3	10%
2	57 – 63	60	2	6.66%
3	64 – 70	67	4	13.33%
4	71 – 77	74	2	6.66%
5	78 – 84	<b>81</b>	12	40%
6	85 – 91	88	7	23.33%
<i>i = 7</i>		–	30	100%

From the table above, the students' score in class interval between 50 – 56 was 3 students (10%), class interval between 57 – 63 was 2 students (6.66 %), class interval between 64 – 70 was 4 students (13.33 %), class interval between 71 – 77 was 2 students (6.66 %), class interval between 78 – 84 was 12 students (40 %), and the last class interval between 85 – 91 was 7 students (23.33 %).

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 50 up to 56 was 3 students, the students' score 57 up to 63 was 2 students, the students' score 64 up to 70 was 4 students, the students' score 71 up to 77 was 2 students, the students' score 78 up to 84 was 12 students, and the last the students' score 85 up to 91 was 7 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 text by using conventional strategy. The score of post-test control class can be seen in the following table

**Table 12**  
**The Score of Control Class in Post-test**

Total	1620
Highest score	80
Lowest score	30
Mean	61.18
Median	54.5
Modus	56.78
Range	50
Interval	8
Standard deviation	14.88
Variants	219.65

Based on the above table the total score of control class in post-test was 1620, mean was 61.18, standard deviation was 14.88, varians was 219.65, median was 54.5, range was 50, modus was 56.78, interval was 8. The researcher got the highest score was 80 and the lowest score was 30. 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:

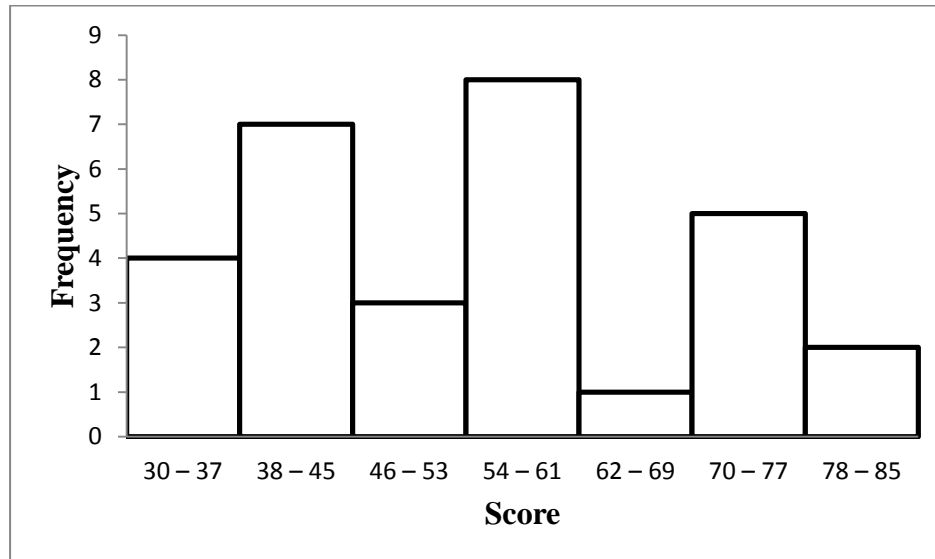


**Table 13**  
**Frequency Distribution of Students' Score**

No	Interval	Mid Point	Frequency	Percentages
1	30 – 37	33.5	4	13.33%
2	38 – 45	41.5	7	23.33%
3	46 – 53	49.5	3	10%
4	54 – 61	57.5	8	26.55%
5	62 – 69	65.5	1	3.33%
6	70 – 77	73.5	5	16.6%
7	78 – 85	81.5	2	6.6%
$i = 8$		–	30	100%

From the table above, the students' score in class interval between 50 – 55 was 4 students (13.33%), class interval between 38 – 45 was 7 students (23.33 %), class interval between 46 – 53 was 3 students (10 %), class interval between 54 – 61 was 8 students (26.55%), class interval between 62 – 69 was 1 students (3.33 %), class interval between 70 – 77 was 5 students (16.66 %), and the last class interval between 78 – 85 was 2 students.

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

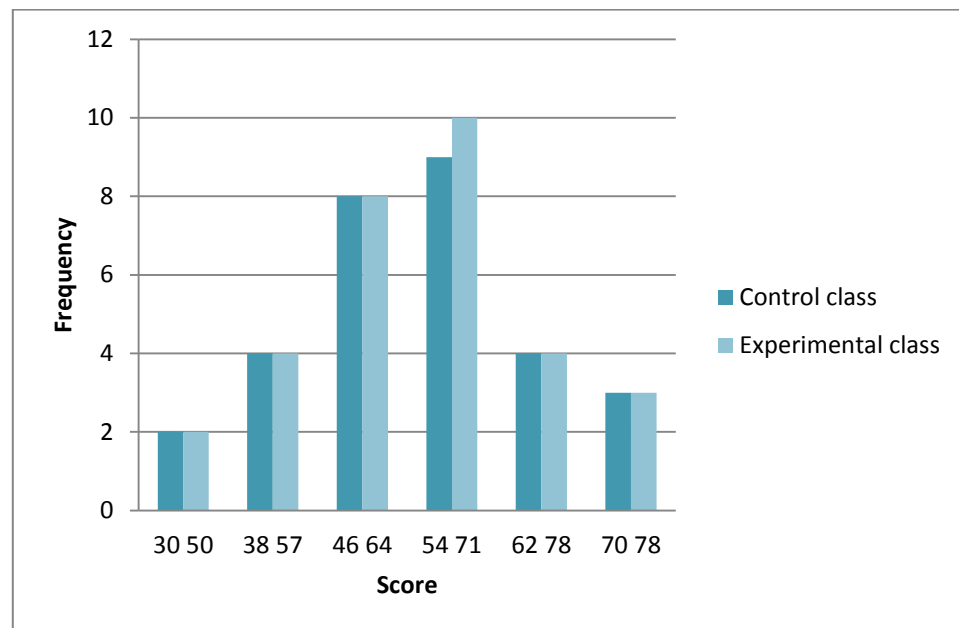


**Figure 5: Description Data Post-Test of Control Class**

From the histogram above, the students' score 30 up to 37 was 4 students, the students' score 38 up to 45 was 7 students, the students' score 46 up to 53 was 3 students, the students' score 54 up to 61 was 8 students, the students' score 62 up to 69 was 1 student, the students' score 70 up to 77 was 5, and the last the students' score 78 up to 85 was 2 students. Then, the score had most frequent was 54 – 61 and the score had lowest frequent was 62 – 69

**c. 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 6: Description Data Pre-Test of Control Class and Experimental Class**

From the histogram above, the students' scores of experimental class was higher than the students' scores of control class.

**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 14**  
**Normality and Homogeneity in Pre-Test**

Class	Normality Test		Homogeneity Test	
	$X_{\text{count}}$	$X_{\text{table}}$	$f_{\text{count}}$	$f_{\text{table}}$
Experiment Class	2.21	11.070	1.09 < 1.88	
Control Class	1.12	12.592		

Based on the above table researcher calculation, the score of experiment class  $Lo = 2.21 < Lt = 11.070$  with  $n = 30$  and control class  $Lo = 1.12 < Lt = 12.592$  with  $n = 30$ , and real level  $\alpha 0.05$ . Cause  $Lo < Lt$  in the both class. So,  $H_a$  was accepted. It means that experiment class and control class were distributed normal. It can be seen in appendix 19.

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

The coefficient of  $F_{\text{count}} = 1.09$  was compared with  $F_{\text{table}}$ . Where  $F_{\text{table}}$  was determined at real  $\alpha 0.05$ , and the different numerator  $dk = N-1 = 30-1 = 29$  and denominator  $dk N-1 = 30-1 = 29$ . So, by using the list of critical value at F distribution is got  $F_{0.05} = 1.88$ . It showed that  $F_{\text{count}} 1.09 < F_{\text{table}} 1.88$ . So, the researcher concluded that the variant from the data of the Students' Reading Comprehensin at MTs N Batangtoru by experimental and control class was homogenous. The calculation can be seen on the appendix 17.

**b. Normality and Homogeneity Post-Test**

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

**Table 15**  
**Normality and Homogeneity in Post-Test**

Class	Normality Test		Homogeneity Test	
	$x_{\text{count}}$	$x_{\text{table}}$	$f_{\text{count}}$	$f_{\text{table}}$
Experiment Class	4.24	11.070	1.64 < 1.88	
Control Class	0.13	12.592		

Based on the table above researcher calculation, the score of experiment class  $Lo = 4.24 < Lt = 11.070$  with  $n = 30$  and control class  $Lo = 0.13 < Lt = 12.592$  with  $n = 28$ , and real level  $\alpha 0.05$ . Cause  $Lo < Lt$  in the both class. So,  $H_a$  was accepted. It means that experiment class and control class were distributed normal. It can be seen in appendix 20.

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

The coefficient of  $F_{\text{count}} = 1.64$  was compared with  $F_{\text{table}}$ . Where  $F_{\text{table}}$  was determined at real  $\alpha 0.05$ , and the different numerator  $dk = N-1 = 30-1 = 29$  and denominator  $dk N-1 = 30-1 = 29$ . So, by using the list of critical value at F distribution is got  $F_{0.05} = 1.88$ . It showed that  $F_{\text{count}} 1.64 < F_{\text{table}} 1.88$ . So, the researcher concluded that the variant from the data of the Students' Reading Comprehension at MTs N

Batangtoru by experimental and control class was homogenous. The calculation can be seen on the appendix 18.

## 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 Intensive Reading Strategy on Students’ Reading Comprehension”. The calculation can be seen on the appendix 21.

**Table 16**  
**Result of T-test from the Both Averages**

Pre-test		Post-test	
$t_{count}$	$t_{table}$	$t_{count}$	$t_{table}$
-0.08	1.67155	7.33	1.67155

$$H_a : \mu_1 > \mu_2$$

Where:

$H_a : \mu_1 > \mu_2$  “There was a significant effect of intensive reading strategy on students’ reading comprehension”.

Based on researcher calculation, researcher found that  $t_{count}$  7.33 while  $t_{table}$  1.67155 with opportunity  $(1 - \alpha) = 1 - 5\% = 95\%$  and  $dk = n_1 + n_2 - 2 = 30 + 30 - 2 = 58$ . Cause  $t_{count} > t_{table}$  ( $7.33 > 1.67155$ ), it means that hypothesis  $H_a$  was accepted and  $H_0$  was rejected. So, there was the significant effect of

intensive reading strategy on students' reading comprehension. In this case, the mean score of experimental class by using intensive reading strategy on students' reading comprehension was 85 and mean score of control class was 61.18 by using conventional strategy. The calculation can be seen on the appendix 21 and 22.

### 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, Ni Putu Sri Indrawati<sup>1</sup> the implementation of intensive reading technique to improve reading comprehension. got the mean score of pre-test of the experimental group was 45. Second, Muhammad Ali Erfanpour<sup>2</sup> "The Effect of intensive and extensive reading strategies on reading comprehension: a case of Iranian high school students" got the mean score of pre-test of the experimental group was 18.77. showed that the experimental group got 50.2. Third, Yeni Afriyeni<sup>3</sup> "the effect of students' reading comprehension by using intensive reading comprehension at grade V D of SDN 6 Pekanbaru" got the mean score of pre-test of the

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<sup>1</sup> Ni Putu Sri Indrawati, The Implementation of Intensive Reading technique to Improve Reading Comprehension at seventh grade retrieved from <http://unmas-library.ac.id/wp-content/uploads/2014/11/THESIS2.pdf>, on Mei 15<sup>th</sup> 2017 at 09.20 a.m.

<sup>2</sup> Muhammad Ali Erfanpour, The Effect of Intensive and Extensive reading Strategies on Reading Comprehension: a case of Iranian high school students', retrieved from <http://file:///C:/Users/User/Downloads/Documents/Erfanpour.pdf>, on Februari 26<sup>th</sup> 2018 at 11:55 am.

<sup>33</sup> Yeni Afriyeni, the effect of students' reading comprehension by using intensive reading comprehension retrieved from <http://www.geogle.co.id/url?q=http://ejournal.unp.ac.id/index.php/elt/article/download/459/3631> on januari 28<sup>th</sup> 2018 at 07.49 a.m.

experimental group was 47.6. Muhammad's pre-test result was higher between Ni putu's and Yeni's pre-test result and pre-test result from Ni putu was lowest among them. Meanwhile, the researcher got the mean score of pre-test of the experimental group was 53. It was the highest pre-test result among the related finding. 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 53 and the lowest mean score of pre-test of the experimental group was gotten by Ni putu where the mean score of pre-test was 45. It means, before using intensive reading strategy, 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, Ni putu got the experimental class score was 77.41, Muhammad got the experimental class score was 82.17. Yeni's post-test result was higher between Ni putu's and Muhammad's post-test result and post-test from Muhammad was lowest from them. Beside, the researcher got the mean score for experimental class after using intensive reading strategy was 85.9 and the control class was 61.9. It was the highest score among 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 85.9 and the lowest mean score of post-test was gotten by Muhammad in his thesis where the mean score of post-test was 78. So, 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.

From the explanation above, there was the increasing from the pre-test score to post-test score after using intensive reading strategy among the related findings. Ni putu got the increasing 32.41, Muhammad got the increasing 27.8, and yeni got the increasing 34.57. The increasing of Yeni's result is was higher between Ni putu's and Muhammad's increasing from and increasing from muhammad was the lowest from them. Meanwhile the researcher got the increasing 32.9. It means Yeni's increasing was the higher and Muhammad increasing was the lowest.

Based on the result, the researcher has got the significant effect of using intensive reading strategy. Ni Putu found that  $t_0$  is higher than  $t_t$  ( $6.77 > 2.00$ ), Muhammad found that  $t_0$  is higher than  $t_t$  ( $4.62 > 2.00$ ), and Yeni Afriyeni found that  $t_0$  is higher than  $t_t$  ( $5.85 > 1.67$ ). From the description, t-test result from Ni putu was higher between Muhammad and Yeni and t-test result from Muhammad was the lowest from them. Besides, the researcher also found that  $t_0$  is higher than  $t_t$  where  $t_0$  was 7.33 and  $t_t$  was 1.67155 ( $7.33 > 1.67155$ ). Where, the researcher result of t-test was the higher among the related findings.

Based on the result above, pre-test result was lowest than post-test. So, it can be concluded that there was a significant effect of intensive reading strategy on students' reading comprehension ant grade VIII Batangtoru.

The researcher discussed the result of this research with the theory from Malessu Adamu Intensive reading is akind of reading in which readers besides linguistic knowledge shouldunderstand semantic details and pay close attention to the text, because, the aim is to obtaincertain information.<sup>4</sup> So, intensive reading strategy has given the 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 previosly stated, it was proved that the students of the experimental group were taught reading by Intensive reading strategy got better result than the control group that were taught reading by using conventional strategy. Finally, intensive reading strategy has given the effect to the research that has been done by the research or the other researcher who mentioned in related findings.

#### **D. Threats of the Research**

The researcher found the threats of the research as follows:

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<sup>4</sup>Malessu Adamu Anteneh, Assesing Intensive Reading Strategies Used By Grade 11 Students in EFL Classes: The Case of Chance Preparatory retrieved from <http://file:///C:/Users/User/Downloads/Documents/Melesse%20Adamu.pdf>.on february 26<sup>th</sup> 2018 at 02.20 pm.

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 can not get the teacher's explanation well and gave the impact to the post-test answer.
3. The students needed more time in applying the intensive reading strategy because it needed concentration to read recount text.

## CHAPTER V

### CONCLUSION AND SUGGESTION

#### A. Conclusion

Based on the result of the research, the conclusions of this research are:

1. Before using intensive reading strategy, the mean score of control class which was taught by conventional strategy was 49.7. both of the scores were low and these scores were under the standardization where the standardization mark is 75.
2. After using intensive reading strategy, the mean score of experimental class was 85.9 and the mean score of control class which was taught by conventional strategy was 61.18. The score of experimental was high and the score of control class was low.
3. The result of research showed that the students' score in the experimental class was higher than control class. The result proves that  $t_0$  was higher than  $t_t$ .  $T_0$  was 7.33 and  $t_t$  was 1.67155 ( $7.33 > 1.67155$ ). It can be concluded that there was the significant effect of Intensive Reading Strategy at Grade VIII of MTs N Batangtoru where  $H_a$  was accepted and  $H_0$  was rejected.

## **B. Suggestion**

Based on the above conclusion, the researcher has some suggestions as follow:

1. For teacher, as an English teacher were hoped to use appropriate strategy to explain or to teach English subject to the students. Then, from the result of the research intensive reading strategy was better whent taught on reading comprehension. So that, the researcher suggest intensive reading strategy can be applied on the English teaching classroom especially for the teachers who want to increase students' reading comprehension.
2. For head master, to make students' get the goal of learning, the teachers make a good preparation and headmaster was give teaching media to teacher. So it can be make students' enjoy in learning.
3. For the students, it is hoped to use Intensive Reading Strategy. Because it can make them to be easy to comprehend the text more quickly.

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KEMENTERIAN AGAMA REPUBLIK INDONESIA  
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: B-04 /MTs. 09.02/kp.01.1/01/2018

: **Surat Balasan**

Kepada Yth :  
Dekan Fakultas Tarbiyah dan Ilmu Keguruan IAIN Padangsidempuan

tempat

Ass. Wr. Wb

Dengan hormat

Sehubungan dengan Surat Dekan Fakultas Tarbiyah dan Ilmu Keguruan IAIN Padangsidempuan. Nomor B- 2278/ In.14/E.4c/TL.00/12/2017. Tentang penelitian untuk penulisan Skripsi di MTsN Batangtoru maka dengan ini kepala MTsN Batangtoru menerangkan bahwa :

Nama : **YANTI PANGGABEAN**  
NPM : 133400073  
Jur/Program Studi : Tarbiyah dan Ilmu Keguruan/TBI  
Alamat : Batangtoru

Adalah benar telah melaksanakan Riset di MTsN Batangtoru. Dalam menyelesaikan skripsinya dengan judul :

**" THE EFFECT OF INTENSIVE READING STRATEGIES ON STUDENTS' READING COMPREHENSION AT GRADE VIII MTsN BATANGTORU".**

Demikian disampaikan, atas perhatian dan bantuan Bapak/Ibu kami ucapkan terima kasih.

Batangtoru, 06 Januari 2018

Kepala



**OLGAN HARAHAP, S.Pd**

NIP. 19680710 199703 1 001



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Nomor : B - 2278 /In.14/E.4c/TL.00/12/2017  
Hal : izin Penelitian  
Penyelesaian Skripsi.

14 Desember 2017

Yth. Kepala MTs N Batangtoru  
Kabupaten Tapanuli Selatan

Dengan hormat, Dekan Fakultas Tarbiyah dan Ilmu Keguruan Institut Agama Islam Negeri Padangsidempuan menerangkan bahwa :

Nama : Yanti Panggabean  
NIM : 13 340 0073  
Fakultas/Jurusan : Tarbiyah dan Ilmu Keguruan/TBI  
Alamat : Batangtoru

adalah benar Mahasiswa IAIN Padangsidempuan yang sedang menyelesaikan Skripsi dengan Judul "The Effect of Intensive Reading Strategies on Students' Reading Comprehension at Grade VIII MTs N Batangtoru". 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.

Pl. Dekan  
Wakil Dekan Bidang Akademik  
  
Dr. Lelya Huda, M.Si.  
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In.14/E.6a/PP.00.9/ 05 /2017

Padangsidimpuan, 16 Mei 2017

Biasa

Pengesahan Judul dan Pembimbing skripsi

Kepada Yth Bapak/Ibu

1. Eka Sustris Harida, M.Pd (Pembimbing I)
2. Fitri Rayani Siregar, M.Hum (Pembimbing II)

Di -

Padangsidimpuan

Assalamu'alaikum Wr.Wb.

Dengan hormat, disampaikan kepada Bapak/ibu bahwa berdasarkan hasil Sidang Tim Pengkaji Kelayakan Judul Skripsi, telah ditetapkan Judul Skripsi Mahasiswa tersebut dibawah ini sebagai berikut:

Nama : YANTI PANGGABEAN  
Nim : 13 340 0073  
Fak/Jurusan : FTIK/TADRIS BAHASA INGGRIS 2  
Judul Skripsi : **The Effect of Intensive Reading strategies on Students' Reading Comprehension at Grade VIII MTs N Batangtoru**

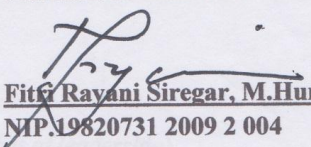
Seiring dengan hal tersebut kami akan mengharapakan kesediaan Bapak/Ibu menjadi pembimbing I dan pembimbing II penelitian penulisan skripsi yang dimaksud.

Demikian kami sampaikan, atas kesediaan dan kerjasama yang baik dari Bapak/Ibu, kami ucapkan terimakasih.

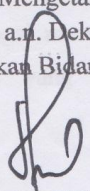
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Pernyataan Kesediaan sebagai Pembimbing

BERSEDIA/TIDAK BERSEDIA  
Pembimbing I

BERSEDIA/TIDAK BERSEDIA  
Pembimbing II

## Appendix 1.

### Lesson Plan (Experimental Class)

Nama Sekolah : MTs N Batangtoru  
Mata Pelajaran : Bahasa Inggris  
Kelas/Semester : VIII-2/ 1  
Alokasi Waktu : 2 x 45 menit

---

#### A Standar Kompetensi

1. Memahami makna dalam teks fungsional pendek dan monolog sederhana berbentuk recount teks dalam konteks kehidupan sehari-hari.
2. Mengungkapkan makna dalam teks fungsional pendek dan teks monolog berbentuk recount teks dalam konteks kehidupan sehari-hari.

#### B. Kompetensi Dasar

1. Merespon makna dalam teks monolog sederhana yang menggunakan ragam bahasa lisan secara akurat, lancar dan berterima dalam teks berbentuk recount.
2. Mengungkapkan makna dalam teks monolog sederhana yang menggunakan ragam bahasa lisan secara akurat, lancar dan berterima dalam teks berbentuk recount.

#### C. Tujuan Pembelajaran

1. Siswa mampu memahami isi dari materi teks berbentuk recount.
2. Siswa mampu merespon teks berbentuk recount.

#### D. Karakter siswa yang diharapkan

1. Mempunyai semangat kepemimpinan (*having spirit of leadership*)
2. Penuh tanggung jawab (*responsible*)
3. Siswa mampu membaca dengan berbagai macam wacana ragam tulis yang di bahas dengan ucapan dan intonasi yang benar, mengidentifikasi topic, mengidentifikasi main idea.

#### E. Metode Pembelajaran

Intensive reading strategy

#### F. Langkah-langkah Pembelajaran

## **1. Pendahuluan**

- a. Guru mengucapkan salam dengan ramah kepada siswa ketika memasuki ruang kelas (nilai yang ditanamkan: santun, peduli)
- b. Mengecek kehadiran siswa (nilai yang ditanamkan disiplin, rajin)
- c. Mengaitkan materi/kompetensi yang akan dipelajari dengan karakter dan dengan merujuk pada silabus, RPP, dan bahan ajar, menyampaikan butir karakter yang hendak dikembangkan selain yang terkait dengan SK/KD.
- d. Guru dan siswa berdiskusi mengenai pertanyaan yang tertera pada buku teks.

## **2. Kegiatan inti**

### Eksplorasi

- Guru menyelidiki dan memperluas latar belakang pengalaman siswa
- Menunjukkan/memperkenalkan materi bacaan kepada siswa
- Guru memperhatikan kemampuan siswa untuk menyesuaikan teks terhadap tujuan yang ditetapkan dan terhadap materi pelajaran
- Guru menyediakan teks bacaan pendek yang terdiri dari 4 atau lima titik.
- Guru menjelaskan kepada siswa bahwa mereka akan membaca sebuah cerita.
- Guru memberikan wejangan atau peraturan tentang intensive reading strategies bagaimana menemukan ide pokok atau tujuan pembelajaran yang hendak dicapai.
- Guru memberikan gambaran tentang materi yang akan di pelajari
- Guru mengajak siswa untuk membaca pelan (silent reading) untuk menemukan main idea, kemudian setelah di baca guru bertanya kepada murid apakah sudah paham atau tidak.
- Guru mengajak siswa supaya aktif, yakni siswa harus memberikan reaksi terhadap apa yang dibacanya dan tidak membuat catata-catatan panjang.
- Guru mengharapkan siswa agar memprhatikan ide pokok yang akan menjadi inti pembahasan dalam bahan bacaan siswa. Dengan ide pokok ini akan memudahkan mereka memberi keseluruhan ide yang ada.
- Guru mengajukan pertanyaan-pertanyaan kepada siswa untuk setiap unsur-unsur pada bahan bacaan siswa
- Siswa mencari jawaban-jawaban terhadap semua pertanyaan-pertanyaan yang diberikan oleh guru.

- Siswa menulis semua jawaban pada lembar kertas yang sudah disediakan.

#### Elaborasi

- Membiasakan siswa aktif dalam membaca paragraph teks recount dan menyuruh siswa untuk memprediksi konten yang akan di baca.
- Memberi siswa kesempatan untuk membaca secara diam (silently) yang bertujuan untuk mengetahui main idea dari teks tersebut. Kemudian, setelah selesai membaca teks tersebut, siswa memberikan pertanyaan yang tidak mereka ketahui dalam teks tersebut.
- Setelah siswa memberikan pertanyaan pada guru mengenai teks tersebut, kemudian guru menjelaskan secara seksama yang mana yang tidak dimengerti siswa tersebut.
- Kemudian guru menanya siswa mengenai unsur-unsur yang ada pada teks tersebut dan mengarahkan siswa untuk meringkas mengenai teks itu.

#### Konfirmasi

- Memberikan umpan balik pada siswa dengan memberi penguatan dalam bentuk lisan pada siswa yang telah dapat menyelesaikan tugasnya.
- Memberikonfirmasi pada hasil pekerjaan yang sudah dikerjakan oleh siswa melalui sumber buku lain.
- Memfasilitasi siswa dengan melakukan refleksi untuk memperoleh pengalaman belajar yang sudah dilakukan.
- Memberikan motivasi kepada siswa yang kurang dan belum bisa mengikuti materi.

### **3. Penutup**

- a. Guru membuat kesimpulan pelajaran.
- b. Guru membacakan kembali hasilnya untuk diadakan koreksi seperlunya.
- c. Guru menyampaikan rencana pembelajaran pada pertemuan berikutnya.
- d. Guru meminta siswa mengakhiri kelas dengan berdoa.
- e. Guru mengucapkan salam.

### G. Sumber/ Bahan/ Alat

1. Buku bahasa Inggris kelas VIII
2. Kamus
3. Printed text

### H. Penilaian

Indikator	Teknik	Bentuk Test	Instrument
Mengidentifikasi informasidari tek <i>srecount</i>	Literal test	Multiple choice	Choose the correct answer by crossing a, b, c, or d

## Appendix 2.

### Lesson Plan (Control Class)

Nama Sekolah : MTs N Batangtoru  
Mata Pelajaran : Bahasa Inggris  
Kelas/Semester : VIII-2/ 1  
Alokasi Waktu : 2 x 45 menit

---

#### **B Standar Kompetensi**

3. Memahami makna dalam teks fungsional pendek dan monolog sederhana berbentuk recount teks dalam konteks kehidupan sehari-hari.
4. Mengungkapkan makna dalam teks fungsional pendek dan teks monolog berbentuk rocount teks dalam konteks kehidupan sehari-hari.

#### **C Kompetensi Dasar**

3. Merespon makna dalam teks monolog sederhana yang menggunakan ragam bahasa lisan secara akurat, lancar dan berterima dalam teks berbentuk recount, narrative, report dan procedure teks. Mengungkapkan makna dalam teks monolog sederhana yang menggunakan ragam bahasa lisan secara akurat, lancar dan berterima dalam teks berbentuk rocount.

#### **D Tujuan Pembelajaran**

1. Siswa mampu memahami isi dari materi teks book.
2. Siswa mampu merespon teks, mengidentifikasi topic, mengidentifikasi main idea, informasi penting dan makna kata yang bergaris bawah dari teks yang dibaca.

#### **E Karakter siswa yang diharapkan**

4. Mempunyai semangat kepemimpinan (*having spirit of leadership*)
5. Penuh tanggung jawab (*responsible*)
6. Komunikatif (*communicative*)
7. Bekerja sama (*cooperative*)



## **F Metode Pembelajaran**

Conventional Strategy

## **G Langkah-langkah kegiatan**

### **4. Kegiatan pendahuluan**

Apersepsi :

- Tanya jawab berbagai hal terkait kondisi siswa
- Menjawab pertanyaan dari guru, misal: Who sits behind you?, Who sits next to you?

Motivasi :

- Menjelaskan pentingnya materi yang akan dipelajari berikut kompetensi yang harus dikuasi siswa

### **5. Kegiatan inti**

Eksplorasi

- Guru menjelaskan tentang materi reading secara ceramah dan bagaimana cara membaca dengan strategy biasa.
- Guru memperhatikan kemampuan siswa untuk menyesuaikan teks terhadap tujuan yang di tetapkan dan terhadap materi pelajaran.
- Guru menginformasikan kepada siswa tentang tujuan dalam membaca, serta menentukan main-main idea, topic, dan mencari conclusion.
- Siswa membaca selintas dengan cepat sebelum mulai membaca bahan bacaan siswa yang memuat tentang materi yang disediakan.
- Guru mengajukan pertanyaan-pertanyaan kepada siswa untuk setiap pasal yang ada pada bahan bacaan siswa
- Siswa mencari jawaban terhadap semua pertanyaan-pertanyaan yang diajukan sebelumnya dan membuat jawaban-jawaban dari sejumlah pertanyaan yang sudah disampaikan oleh guru.

Elaborasi

- Membiasakan siswa aktif dalam membaca paragraph teks recount dan menyuruh siswa untuk memprediksi konten yang akan di baca.
- Memberi siswa kesempatan untuk membaca secara diam (silently) yang bertujuan untuk mengetahui main idea dari teks tersebut. Kemudian, setelah selesai membaca teks tersebut, siswa memberikan pertanyaan yang tidak mereka ketahui dalam teks tersebut.
- Setelah siswa memberikan pertanyaan pada guru mengenai teks tersebut, kemudian guru menjelaskan secara seksama yang mana yang tidak dimengerti siswa tersebut.
- Kemudian guru menanya siswa mengenai unsur-unsur yang ada pada teks tersebut dan mengarahkan siswa untuk meringkas mengenai teks itu.

#### Konfirmasi

- Guru bertanya jawab tentang hal-hal yang belum diketahui siswa
- Guru bersama siswa bertanya jawab meluruskan kesalahan pemahaman, memberikan penguatan dan penyimpulan
- Memfasilitasi siswa dengan melakukan refleksi untuk memperoleh pengalaman belajar yang sudah dilakukan
- Memberikan motivasi kepada siswa yang kurang dan belum bisa mengikuti materi

### **6. Penutup**

- a. Guru membuat kesimpulan pelajaran.
- b. Guru membacakan kembali hasilnya untuk diadakan koreksi seperlunya.
- c. Guru menyampaikan rencana pembelajaran pada pertemuan berikutnya.
- d. Guru meminta siswa mengakhiri kelas dengan berdoa.
- e. Guru mengucapkan salam.

### **H Sumber/ Bahan/ Alat**

4. Buku bahasa Inggris kelas VIII
5. Kamus
6. Printed text

## I Penilaian

Indikator	Teknik	Bentuk Test	Instrument
Mengidentifikasi informasi dari teks <i>recount</i>	Literal test	Multiple choice	Choose the correct answer by crossing a, b, c, or d

### Appendix 3

#### Pre-Test Instrument (after Testing Validity)

Information : This is just to know your knowledge in reading comprehension and there is no affected in your appraisal in final examination of this school ( ini hanya untuk mengetahui kemampuan kalian dan tidak berpengaruh pada nilai kalian pada sekolah ini)

Name :

Class :

Instruction : Read the texts 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 the question. So, you choose the best answer, A, B, C or D to each question. Give mark (X) on the best your question.

Read the text and answer questions 1.

It was Sunday morning December 26th 2004. The day that i would never forget forever. We went to the beach in Mculaboh, Aceh. Many people were therewhen I arrived.

When we were enjoying the beautiful sunrise, suddenly we were shocked by a violent shake in the ground. Everybody in the beach was panic. We soon realized that it was a very big earthquake although it struck in a very short period of time.

After that, we saw the water going on into the middle of the sea. No wonder if there where many kinds of fish left behind on the sand. We all seemed to be astonished by the view until we realized that there was a huge wave coming towards us and destroying everything in its way.

I didn't realize what had happend until i found my self hanging on a branchof a tree.

1. What is the topic of the text?
  - a. The story about terrible a earthquake

- b. The writer's experience with a big earthquake
- c. The steps to avoid danger in your life
- d. The description of a beach in Mealaboh

Read the text and answer the question 2 to 3.

I am so glad that today is over. So many things have gone wrong. For some reasons I didn't sleep a wink last night. I was very tired when Mum called me this morning. I feel a sleep again until Mum called me again. That snooze made me late.

I did not have time for breakfast. I was starving as I ran to catch the school bus. I just missed it. Dad had to ride me to school. He was late fo teaching at his school anh he was furious with me. He scolded me for being late.

I arrived at school on time. The teacher asked us to hand in our homework. My home work was not in my bag. I had forgotten to put it in my bag the night before. I usually check my bag in the morning . I did not do this because I was late I had to do extra assignment as a punishment.

After biology lesson, I did not tie my shcolace properly. I tripped over it. And fell down the stairs. I hurt my knee and had to have a bandage on it. What a terrible day! I hope that I have much better one tomorrow.

- 2. Word "forgotten" (from the third paragraph in the fourth sentence) contrast to...
  - a. Lost
  - b. Remember
  - c. Expelled
  - d. Helped
- 3. What can you conclude of the text?
  - a. A someone terrible day
  - b. It was a simple experience
  - c. It was a stop activities
  - d. Many great activities

Read the text and answer questions 4 to 7.

Fruits are a source of nourishing substance that keep us alive and healthy. For example, they contain many vitamins, especially vitamin A and C, and many minerals, such as calcium, potassium, and zinc. They also provide fiber for a healthy digestive system and carbohydrates that the body needs to make energy. They don't have a lot of calories to make us fat.

People use fruits for many things. We make juices from them. We cook bread and pie with them. We make jams and jellies and sweets. We freeze them to eat later. We even make alcohol from fruit. Beer comes from grains, wine comes from grapes, and some brandies are made from plums, apricots, or other fruits.

But most of the time, we don't do anything special with fruits. We eat them fresh, just as they are!

4. What is the main idea of the second paragraph?
  - a. We make juice from fruits.
  - b. People use fruits for many things.
  - c. Some beer and brandies are made of fruits.
  - d. We freeze fruits to eat whenever we need later.
5. What is the topic of the text?
  - a. Kinds of fruit.
  - b. Shortage of fruit.
  - c. Uterus of fruit.
  - d. Type of fruit color.
6. According to the text, the using of fruits are...
  - a. We make as decoration in our house, especially in the kitchen.
  - b. We make toys for children when they are playing game.
  - c. We make them as extra food of desire just for children.
  - d. We make juices, cook bread and pie, and we make jarsms, jellies, and sweet from them.
7. Word "keep" (from the first paragraph in the first line also) similiar to....
  - a. Ugly
  - b. Lie

- c. Watch
- d. Care

Bees are flying insects closely related to wasps and ants, and are known for their role in pollination and for producing honey and beeswax. There are nearly 20,000 known species of bees in nine recognized families though many are undescribed and the actual number is probably higher. They are found on every continent except Antarctica, in every habitat on the planet that contains insect-pollinated flowering plants.

Bees have a long proboscis (a complex “tongue”) that enables them to obtain the nectar from flowers. They have antennae almost universally made up of 13 segments in males and 12 in females, as is typical for the superfamily. Bees all have two pairs of wings, the hind pair being the smaller of the two; in a very few species, one sex or caste has relatively short wings that make flight difficult or impossible, but none are wingless.

The smallest bee is *Trigona minima*, a stingless bee whose workers are about 2.1 mm (5/6”) long. The largest bee in the world is *Megachile pluto*, a leafcutter bee whose females can attain a length of 39 mm (1.5”). Members of the family Halictidae, or sweat bees, are the most common type of bee in the Northern Hemisphere, though they are small and often mistaken for wasps or flies.

8. What is the main idea of paragraph one?
- a. Bees live on every continent.
  - b. Bees belong to flying insects.
  - c. Bees produce honey and beeswax.
  - d. Bees only live with insect-flowering plants.
9. Word “smallest” (from the third paragraph in the first line) construct to...
- a. Biggest
  - b. Same
  - c. Higher
  - d. Tall

Read the text and answer the questions 10 to 12.

On Saturday night, we went to the Town Hall. It was the last day of the year and a large crowd of people had gathered under the Town Hall clock. It would strike twelve in twenty minutes' time. Fifteen minutes passed and then, at five to twelve, the clock stopped. The big minute hand did not move. We waited and waited, but nothing happened. Suddenly someone shouted, "It's two minutes past twelve! The clock has stopped!"

I looked at my watch, it was true. The big clock refused to welcome the New Year. At that moment, everybody began to laugh and sing.

10. What is the topic of the text?
  - a. The big problem
  - b. The amazing past even
  - c. The funny waiting experience
  - d. The good style of the story
11. What is the main idea of paragraph two?
  - a. At two minutes past twelve the big clock refused to welcome the new year
  - b. On Saturday, we went to the Town Hall
  - c. She looked a nice moment
  - d. After two minutes past twelve nothing happened
12. What can you conclude of the text?
  - a. The funny thing in the story
  - b. The problem that the writer met
  - c. The opening of the story
  - d. The past event

Read the text and answer questions 13 to 15.

On Wednesday, my students and I went to Yogyakarta. We stayed at Dirgahayu Hotel which is not far from Malioboro.

On Thursday, we visited the temples in Parambanan. There are three big temples, the Brahmana, Syiwa and Wisnu temples. They are really amazing. We visited only Brahmana and Syiwa temples, because Wisnu temple is being renovated.



On Friday morning we went to Yogya Kraton. We spent about two hours there. We were lucky because we were led by a smart and friendly guide. Then we continued our journey to Borobudur. We arrived there at four p.m. at 5p.m. We heard the announcement that Borobudur gate would be closed.

In the evening we left for Jakarta by tour bus.

13. How long days did they take their trip?
  - a. Three days
  - b. Four days
  - c. Thirty days
  - d. Seven days
14. According to the text, true sentence below is....
  - a. They visited all of Prambanan Temples.
  - b. They visited Wisnu Temples and brahmana Temples.
  - c. They visited only Brahmana and Syiwa Temples.
  - d. They visited only Wisnu Temples
15. Word "visited" (from the second paragraph in the first line) similar to...
  - a. Saw
  - b. Closed
  - c. Bought
  - d. Lent

Read the text and answer questions 16.

There was a girl named Bawang Putih, she lived with her step mother and her step sister named Bawang Merah. Bawang Putih's life was sad. Her step mother and her step sister treated Bawang Putih badly and always asked her to do all the household chores.

One morning, Bawang Putih was washing some clothes in a river. Accidentally, her mother's clothes fell down to the river. Finally she met an old woman. The old woman returned the clothes. She also gave Bawang Putih a small pumpkin. At home, suddenly Bawang Putih and her step mother and step sister were surprised. Inside the pumpkin they found jewelries. Bawang

Merah hurry up. Go to the river then found the old woman and took big pumkin. They were screaming. There were a lot of snakes inside the pumkin!

Finally both of them realized their mistakes. They appolized and Bawang Putih forgave them.

16. What can you conclude of the text?

- a. There were a lot of snakes inside the pumkin!
- b. Her step mother and sister realized their mistakes
- c. Bawang Merah badly and always asked her to do all the household
- d. Bawang Merah forgave them

Read the text and answer questions 17 to 20.

Last holiday I went to Paris. I visited museums and sat in public gardens. A friendly waiter taught me a few words of french. Then he lent me a book. I read a few lines, but I did not understand a word. Every day I thought about postcards. My holidays passed quickly, but I did not send any cards to my friends.

On the last day I made a big decision, I got up early and bought thirty seven cards. I spent the whole day in my room, but I did not write a single card!

17. What is the main idea of paragraph two?

- a. He got up early and bought thirty seven cards, on the last day
- b. He visited museums and sat in public gardens
- c. But, he did not send any cards to his friends
- d. Every day he tought about postcards

18. What is the topic of text

- a. Visiting museum
- b. Postcard
- c. Words of french
- d. Holiday

19. According to the text, wrong sentence below is...
- a. She got up early and bought thirty seven cards.
  - b. She read a few lines, but she did not understand a word
  - c. She got up early and bought seventy cards
  - d. She thought about postcards every day.
20. What can you conclude of the text?
- a. A friendly waiter from Paris
  - b. Missing communication about the postcard
  - c. A great experience in Paris
  - d. A busy activities

## Appendix 4

### Post-Test Instrument (after Testing Validity)

Information : This is just to know your knowledge in reading comprehension and there is no affected in your appraisal in final examination of this school ( ini hanya untuk mengetahui kemampuan kalian dan tidak berpengaruh pada nilai kalian di sekolah ini)

Name :

Class :

Instruction : Read the texts 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 the question. So, you choose the best answer, a, b, c or d to each question. Give mark (X) on the best your question.

Read the text and answer question 1 to 3.

Last holiday was my unforgettable experience I spent my holiday by visiting many interesting places.

First, I visited my grandmother in Bandung. I enjoyed Cibaduyut, Cihampelas, geology museum, and Tangkuban Perahu. I spent two days there. I didn't forget to buy special snack from that city, Peuyeum.

My next destination was Jakarta. Where my uncle lived. Although the weather was hot. I could enjoyed TMII, Sea World, Mariana Beach, and Monas.

My last trip was Bogor, the rain city. The cool weather made my vocation nice and enjoyable. Mount was my cousins resident. Tasting sweet roasted corn with a glass of hot milk coffee and watching woman picking tea leaves was really wonderful thing.

1. What is the topic of the text above?
  - a. A good job
  - b. Holiday
  - c. Nice places
  - d. Big family
2. How many places did he visit in Bandung?
  - a. Four places

- b. One places
- c. Six places
- d. Seven places

3. What can you conclude of the text?

- a. Unforgettable experience
- b. A bad experience
- c. Six places
- d. Seven places

Read the text and answer question 4.

Two days ago, Dinar, my roommate woke up late and she had to go to campus. When she wanted to take her motorcycle, in fact she couldn't move it because there were some motorcycle that blocked up her motorcycle. She tried to move all of the motorcycle, so that her motorcycle could move from the garage. But she couldn't do it. Then, she called Adel who had that motorcycle which blocked it up.

After that, her friend who had that motorcycle helped her. Finally, she could move her motorcycle and rode it to go to campus.

4. Word "woke up" (from the first sentence) contrast to...

- a. Get up
- b. Stand
- c. Sleep
- d. Open

Read the text and answer question 5 to 8.

Last week my friend and I were bored after three weeks of holidays, so we rode our bikes to Pasir Kencana Beach, which is only kilometres from where I live. When we arrived at the beach, we were surprised to see there was hardly anyone there.

After having a quick dip in the ocean, which was really cold, we realized one reason there were not many people there. It was also quite windy. After we bought some hot chips at the takeaway store nearby, we rode our bikes down the beach for a while, on the hard, damp part of the sand. We had the wind behind us and, before we knew it, we were many miles down the beach.

Before we made the long trip back, we decided to paddle our feet in the water for a while, and then sit down for a rest. While we were sitting on the beach, just chatting, it suddenly dawned on us that all the way back, we would be riding into the strong wind.

When we finally made it back home, we were both totally exhausted! But we learned some good lessons that day.

5. What is the topic of the text?
  - a. Job
  - b. Holiday
  - c. Task
  - d. Private
  
6. What is the main idea of the third paragraph?
  - a. Meeting friends
  - b. Visiting beach before they go back
  - c. Looking a beautiful view
  - d. Buying some souvenirs
  
7. According to the text, wrong sentence below is...
  - a. They decided to paddle before made the long trip back
  - b. That was totally exhausted from them
  - c. They rode their bikes to the zoo
  - d. They surprised to see there was hardly anyone there
  
8. Word “rode” (from the third sentence in the second paragraph) similiar to...
  - a. Trip
  - b. Address
  - c. Course
  - d. Direction

Read the text and answer question 9 to 11.

Last Monday was a busy day for me. I spent my time to do a lot of activities from college to my home.

First, at the morning. I did my presentation’s assignment with with my partner, she was Nurhidayah. It look 3 hours. And then we went to the campus for joining lecturer. But, the lecturer said that our presentation would be started next week. It made us disappointed. The class was finished at 12.30

After that, I had to go home because my grandmother was in a bad condition. She was hospitalized. So, it was a must for me to back home at the time. When I got there, there were so many members of my family. There were about 10 people. My aunt, my niece, my uncle and some of my cousions. We all hoped that our grandmother would get better soon. Those activities made my day busy.

9. What is the main idea of paragraph there?
  - a. Activity and visiting hospital
  - b. A great holiday in the zoo
  - c. Police academy world
  - d. A great job
  
10. What can you conclude of the text?
  - a. All of his activity made his day busy
  - b. A part of job
  - c. Family trip
  - d. Relax day
  
11. According to the text, John got busy day because...
  - a. There was a special job
  - b. There were his activities from market to his house
  - c. There were his activities from collage to his house
  - d. There were many bad jobs

Read the text and answer questions 12 to 13.

One christmas in 2007, I was joining a final test try out at school. It was held from 8 a.m. to 2 p.m. One of my schoolmates, Rini, asked me for accompanying her to the bus stop. When we arrived there, suddenly the heavy rain fell down from the sky. Rini suggested me to go home soon while she was entering the bus.

It was still raining when I was home. The rain did not stop and became bigger when the night had come. People were standing in front of their house, hoping that the flood would not come. In the middle of the night, I got news that South Puwodadi had been drowned.

The next day, Purwodadi had become a flood area. All activities were paralyzed. No one went for work or school because the land had been covered by flood. However, I thank God for not allowing the flood entered my house. Even my house had been changed into an emergency kitchen. It was so crowded. There. I and my father took a walk around the center market and Central Purwodadi. All that we could see was water and water. At night, the flood looked like a beautiful ocean with the moonlight on it. I felt as if I was one of the passangersof Titanic who has sailing on the sea.

Finally, the flood was starting to decrease in the next morning. My family and I cleaned our front yard together. That was the greatest flood I had ever experienced in my hometown.

12. What can you conclude of the text?
  - a. That was the greatest flood that I had ever experienced in my hometown

- b. It was still raining when I was home
- c. It was so crowded there
- d. I felt as if I was one of the passengers of Titanic who was sailing on the sea

13. Word “suggested” (from the first paragraph in the third line) similar to...
- a. Giving opinion
  - b. Rejected
  - c. Accepted
  - d. Opened

Read the text and answer questions 14 to 16.

I had a bad experience when I did shopping because of the shop assistant’s fault. However, the security officer of the shop really embarrassed me of stealing a pair of blue jeans. That was on Sunday, afternoon. I went to a fashion shop with my friends. I chose a pair of blue jeans to buy and paid for them at the cashier. Unfortunately, the shop assistant was careless. She forgot to take the sensor clip on the blue jeans.

So, when I left the shop, the detector beeped. The security officer shouted at me, “Hey, you...! stop!!” Then, he took me to the manager’s room.

After examining, the security officer and the manager realized that it was not my fault. They said they were very sorry about what had happened. Finally, the manager asked me to take one piece of clothing for free.

14. What is the topic of the text?
- a. Bad shopping experience
  - b. Bad studying experience
  - c. A great shopping experience
  - d. A nice day
15. Word “bad” (from the first sentence in the first paragraph) contrast to...
- a. Busy
  - b. Terrible
  - c. Nice
  - d. Simple
16. According to the text, why a security officer shouted Sila?
- a. Because Sila forgot to take the sensor clip on the blue jeans
  - b. Sila took a blue jeans in a fashion shop
  - c. Sila’s friend forgot to take the sensor clip on the blue jeans



- d. Because a shop assistant was careless to take censor clip on the blue jeans

Read the text and answer the question 17 to 18.

Yesterday at my school we had international Day. We had performances, food stalls, displays, raffle ticket draw and some of us were dressed in costumes.

We started our day off with performances but the one I liked best was the one from fourth grade. It was about games. The performances I was in was called Labamba.

Straight after our performances. We had our lunch. There were food stalls. They came from Australia, Asian, Arabis, and Greece.

Every one had a job. These people were from sixth grade. I did my job after lunch. My job was to sell International Day Nooks. We had display at the hall. These display were good but I didn't get to see them. The display came from a lot of countries.

There was also a Trash and Treasure stall where they sell toys. The school got these things by asking the children to bring them in. After lunch, we had a raffle ticket draw. I didn't win anything but a lot of people did.

Although i didn't win anything, International Day was still fun.

17. What is the topic of the text?

- a. Some performances
- b. International Day
- c. Traveling Experience
- d. Style of school

18. What is the main idea of the text?

- a. Kinds and styles of performances International Day.
- b. Food of some country
- c. The winner of the performance
- d. A bad job International Day

Read the text and answer questions 19-20

Last summer I got a fantastic holiday, I visited some great places.

I went to an airport and was going to fly to Cleveland. I was spending there two days. I liked to see some Cleveland Cavaliers basketball matches.

Then I went to Hollywood. Hollywood is a famous district in Los Angeles, California, United States. It had become world-famous district in Los Angeles, industry. Four major film

companies-Paramount, Warner Bros., RKO and Culumbia-had studios in Hollywood. I did not want to leave but I had to.

After that, I went to New York city. I visited the Statue of Liberty. I went from the bottom up Manhattan to the top of the crown. That was very amazing.

The palaces made me feel at home but I have to go home. Next time I would return to them.

19. What is the main idea of the text?
  - a. Visiting some nice places
  - b. Visiting a market
  - c. Watching a film in the movie
  - d. Study tour to England
  
20. What can you conclude of the text?
  - a. The place not amazing but many solder there
  - b. A simple place and beautiful views
  - c. The place like his town and he hopes went there again
  - d. A new place in Cleveland

## Appendix 5

### Key Answer for Pre-test

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

### Key Answer for Post-test

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

21. Appendix 6

22. Validity of Pre-Test

NO	NO ITEM																									Xt	Xt <sup>2</sup>
	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		
1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	21	441
2	0	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	20	400
3	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	1	1	1	1	21	441
4	1	1	1	1	0	1	0	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	19	361
5	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	1	7	49
6	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	1	1	1	1	21	441
7	0	1	1	1	0	1	1	1	1	0	0	1	1	0	0	1	1	0	1	1	0	0	1	1	0	15	324
8	1	1	1	0	0	0	0	1	1	0	1	1	0	0	0	1	0	1	0	0	1	0	0	1	1	12	144
9	1	1	0	1	0	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	0	1	1	0	18	324
10	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0	0	1	0	1	1	1	0	0	1	1	15	225
11	0	0	1	0	0	0	1	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	1	1	1	9	81
12	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	22	484
13	0	0	1	1	0	1	1	1	1	1	1	0	0	0	0	1	1	1	0	0	1	1	1	1	1	16	256
14	0	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	19	361
15	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	22	484
16	1	1	1	0	1	0	1	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	20	400
17	0	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	1	17	289
18	1	1	0	1	0	0	1	0	1	0	1	0	0	0	0	1	1	0	0	1	1	1	1	1	1	14	196
19	1	1	1	1	1	0	1	1	1	1	0	1	1	0	0	1	1	1	1	0	1	1	1	1	1	20	400
20	0	1	1	1	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	0	17	289
21	1	0	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	20	400
22	1	0	1	1	1	0	1	1	1	1	1	1	0	0	0	1	1	1	1	1	0	1	1	0	0	17	289
23	1	1	1	1	1	1	0	0	1	0	1	0	0	1	1	1	0	1	1	0	1	0	1	1	1	17	289
24	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	4	16
25	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	21	441
26	0	0	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	5	25
27	0	1	0	0	1	1	1	0	0	0	1	0	0	1	1	1	1	1	1	1	0	1	1	0	0	12	144

28	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	0	1	1	1	1	1	1	1	0	21	441
29	1	0	1	1	0	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	0	1	1	1	18	324
30	1	1	1	0	0	1	1	1	1	1	0	1	1	0	0	1	0	1	1	1	1	1	1	1	1	19	361
N= 30	18	24	25	21	12	21	23	22	26	13	22	22	18	7	11	23	18	23	24	21	21	21	24	23	23	$\Sigma x =$ 499	$\Sigma x^2 =$ 9120
p	0,6	0,8	0,8	0,7	0,4	0,7	0,8	0,7	0,9	0,4	0,7	0,7	0,6	0,2	0,4	0,8	0,6	0,8	0,8	0,7	0,7	0,7	0,8	0,8	0,7		
q	0,4	0,2	0,2	0,3	0,6	0,3	0,2	0,3	0,1	0,6	0,3	0,3	0,4	0,8	0,6	0,2	0,4	0,2	0,2	0,3	0,3	0,3	0,2	0,2	0,3		

Appendix 7

Validity of Post-Test

No	NO ITEM																									Xt	Xt <sup>2</sup>
	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		
1	1	1	1	1	0	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	22	484
2	1	1	0	1	0	1	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	20	400
3	1	1	0	1	0	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	21	441
4	1	1	0	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	19	361
5	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	7	49
6	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	21	441
7	1	1	0	1	0	0	0	0	0	1	1	0	1	0	1	1	0	0	0	0	0	1	1	0	1	15	225
8	0	1	0	0	0	0	0	0	1	1	1	1	0	0	1	0	1	0	1	0	1	1	1	0	1	12	144
9	1	1	0	0	1	0	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	0	1	18	324
10	1	0	0	0	1	1	1	0	1	0	1	1	1	1	0	1	1	0	1	0	1	0	0	1	1	15	225
11	0	0	0	0	0	1	1	1	1	1	0	1	0	0	1	0	0	0	1	0	0	1	0	0	0	9	81
12	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	22	484
13	1	1	1	0	0	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0	0	0	16	256
14	1	1	0	1	1	1	1	1	1	1	0	0	1	1	0	0	1	1	1	1	1	1	1	0	1	19	361
15	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	22	484
16	1	1	0	1	0	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	0	1	20	400
17	0	1	1	0	0	0	0	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0	1	0	1	15	225
18	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	1	1	1	1	1	0	1	0	0	1	14	196
19	1	1	0	1	0	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	20	400
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	256
21	1	1	0	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	20	400
22	0	0	1	1	1	1	1	1	0	0	1	0	1	1	0	1	1	1	1	1	0	1	0	0	1	16	256
23	1	0	0	0	1	1	1	0	1	1	0	1	1	1	1	1	0	0	0	0	1	1	1	0	1	15	225
24	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	4	16
25	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	23	529
26	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	5	25

27	1	1	0	0	1	1	0	1	1	0	0	1	1	0	0	1	1	1	0	0	0	1	0	0	0	12	144
28	1	1	0	1	0	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	21	441
29	1	1	0	1	0	1	1	0	1	1	1	0	1	1	0	0	0	1	1	1	1	1	1	1	1	18	324
30	1	1	0	1	0	1	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	20	
N= 30	22	22	7	18	11	23	18	23	24	21	18	14	25	21	12	22	23	22	26	16	25	22	13	23	23	$\Sigma x=497$	$\Sigma x^2=8997$
p	0,7	0,7	0,2	0,6	0,4	0,8	0,6	0,8	0,8	0,7	0,6	0,4	0,8	0,7	0,4	0,7	0,8	0,7	0,9	0,5	0,8	0,7	0,4	0,8	0,8		
q	0,3	0,3	0,8	0,4	0,6	0,2	0,4	0,2	0,2	0,7	0,4	0,6	0,2	0,3	0,6	0,3	0,2	0,3	0,1	0,5	0,2	0,3	0,6	0,2	0,2		

Appendix 8

Reliability of Pre-Test

NO	NO ITEM																									Xt	Xt <sup>2</sup>
	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		
1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	21	441
2	0	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	0	1	1	20	400
3	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	1	1	1	1	21	441
4	1	1	1	1	0	1	0	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	19	361
5	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	1	7	49
6	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0	1	1	1	1	21	441
7	0	1	1	1	0	1	1	1	1	0	0	1	1	0	0	1	1	0	1	1	0	0	1	1	0	15	324
8	1	1	1	0	0	0	0	1	1	0	1	1	0	0	0	1	0	1	0	0	1	0	0	1	1	12	144
9	1	1	0	1	0	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	0	1	1	0	18	324
10	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0	0	0	1	0	1	1	1	0	0	1	15	225
11	0	0	1	0	0	0	1	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	1	1	9	81
12	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	22	484
13	0	0	1	1	0	1	1	1	1	1	1	0	0	0	0	1	1	1	0	0	1	1	1	1	1	16	256
14	0	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	19	361
15	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	22	484
16	1	1	1	0	1	0	1	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	20	400
17	0	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0	17	289
18	1	1	0	1	0	0	1	0	1	0	1	0	0	0	0	1	1	0	0	1	1	1	1	1	1	14	196
19	1	1	1	1	1	0	1	1	1	1	0	1	1	0	0	1	1	1	1	0	1	1	1	1	1	20	400
20	0	1	1	1	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	0	17	289
21	1	0	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	20	400
22	1	0	1	1	1	0	1	1	1	1	1	1	0	0	0	1	1	1	1	1	0	1	1	0	0	17	289
23	1	1	1	1	1	1	0	0	1	0	1	0	0	1	1	1	0	1	1	0	1	0	1	1	1	17	289
24	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	4	16
25	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	21	441
26	0	0	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	5	25



27	0	1	0	0	1	1	1	0	0	0	1	0	0	1	1	1	1	1	1	0	1	1	0	0	1	12	144
28	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	0	1	1	1	1	1	1	1	0	21	441
29	1	0	1	1	0	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	0	1	1	1	18	324
30	1	1	1	0	0	1	1	1	1	1	0	1	1	0	0	1	0	1	1	1	1	1	1	1	1	19	361
N=																										$\Sigma x =$	$\Sigma xt^2 =$
30	18	24	25	21	12	21	23	22	26	13	22	22	18	7	11	23	18	23	24	21	21	21	24	23	23	499	9120
p	0,6	0,8	0,8	0,7	0,4	0,7	0,8	0,7	0,9	0,4	0,7	0,7	0,6	0,2	0,4	0,8	0,6	0,8	0,8	0,7	0,7	0,7	0,8	0,8	0,7		
q	0,4	0,2	0,2	0,3	0,6	0,3	0,2	0,3	0,1	0,6	0,3	0,3	0,4	0,8	0,6	0,2	0,4	0,2	0,2	0,3	0,3	0,3	0,2	0,2	0,3		
p.q	0,24	0,16	0,16	0,21	0,24	0,21	0,16	0,21	0,09	0,24	0,21	0,21	0,24	0,16	0,24	0,16	0,24	0,16	0,16	0,21	0,21	0,21	0,16	0,16	0,21	$\Sigma pq =$	4,86

Appendix 9

Reliability of Post-Test

No	NO ITEM																									Xt	Xt <sup>2</sup>
	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		
1	1	1	1	1	0	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	22	484
2	1	1	0	1	0	1	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	20	400
3	1	1	0	1	0	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	21	441
4	1	1	0	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	19	361
5	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1	0	1	7	49
6	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	21	441
7	1	1	0	1	0	0	0	0	0	1	1	0	1	0	1	1	0	0	0	0	1	1	0	1	1	15	225
8	0	1	0	0	0	0	0	0	1	1	1	1	0	0	1	0	1	0	1	0	1	1	1	0	1	12	144
9	1	1	0	0	1	0	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	0	1	1	18	324
10	1	0	0	0	1	1	1	0	1	0	1	1	1	1	0	1	1	0	1	0	1	0	0	1	1	15	225
11	0	0	0	0	0	1	1	1	1	1	0	1	0	0	1	0	0	0	1	0	0	1	0	0	0	9	81
12	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	22	484
13	1	1	1	0	0	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0	0	0	16	256
14	1	1	0	1	1	1	1	1	1	1	0	0	1	1	0	0	1	1	1	1	1	1	0	1	1	19	361
15	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	22	484
16	1	1	0	1	0	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0	1	1	20	400
17	0	1	1	0	0	0	0	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0	1	0	1	15	225
18	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	1	1	1	1	1	0	1	0	0	1	14	196
19	1	1	0	1	0	1	0	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	20	400
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16	256
21	1	1	0	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	20	400
22	0	0	1	1	1	1	1	1	1	0	0	1	0	1	1	0	1	1	1	1	0	1	0	0	1	16	256
23	1	0	0	0	1	1	1	0	1	1	0	1	1	1	1	1	0	0	0	0	1	1	1	0	1	15	225
24	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	4	16
25	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	23	529
26	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	5	25

27	1	1	0	0	1	1	0	1	1	0	0	1	1	0	0	1	1	1	0	0	0	1	0	0	0	12	144
28	1	1	0	1	0	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	21	441
29	1	1	0	1	0	1	1	0	1	1	1	0	1	1	0	0	0	1	1	1	1	1	1	1	1	18	324
30	1	1	0	1	0	1	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	20	
N= 30																										$\Sigma x =$ 497	$\Sigma x^2 =$ 8997
q	0,7	0,7	0,2	0,6	0,4	0,8	0,6	0,8	0,8	0,7	0,6	0,4	0,8	0,7	0,4	0,7	0,8	0,7	0,9	0,5	0,8	0,7	0,4	0,8	0,8		
q	0,3	0,3	0,8	0,4	0,6	0,2	0,4	0,2	0,2	0,7	0,4	0,6	0,2	0,3	0,6	0,3	0,2	0,3	0,1	0,5	0,2	0,3	0,6	0,2	0,2		
pq	0, 21	0, 21	0, 16	0, 24	0, 24	0, 16	0, 24	0, 16	0, 16	0, 21	0, 24	0, 24	0, 16	0, 21	0, 24	0, 21	0, 16	0, 21	0, 09	0, 25	0, 16	0, 21	0, 24	0, 16	0, 16	$\Sigma pq=4,89$	

## Appendix 10

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

### A Calculation of Pre-test

#### 1. Means score from score total ( $M_t$ )

$$M_t = \frac{\sum x_t}{N}$$

$$M_t = \frac{499}{30} = 16.63$$

#### 2. Standard deviation ( $SD_t$ )

$$SD_t = \sqrt{\frac{\sum x_t}{N} - \left(\frac{\sum x_t}{N}\right)^2}$$

$$SD_t = \sqrt{\frac{9120}{30} - \left(\frac{499}{30}\right)^2}$$

$$SD_t = \sqrt{304 - 16.63^2}$$

$$SD_t = \sqrt{304 - 276,5}$$

$$SD_t = \sqrt{27,5} = 5.25$$

#### 3. Mean score ( $M_p$ )

Item 1  $M_{p1} = \frac{\text{the total of students score that answer true item}}{n1}$

$$M_{p1} = \frac{22 + 20 + 21 + 19 + 21 + 12 + 18 + 15 + 22 + 22 + 20 + 14 + 20 + 20 + 17 + 21 + 18 + 19}{18}$$

$$M_{p1} = \frac{341}{18} = 18.94$$

Item 2  $M_{p2} = \frac{\text{the total of students score that answer true item}}{n2}$

$$M_{p2} = \frac{21 + 20 + 21 + 19 + 7 + 21 + 15 + 12 + 18 + 15 + 22 + 19 + 22 + 20 + 17 + 14 + 20 + 1}{7 + 20 + 17 + 17 + 12 + 21 + 19} = \frac{426}{24} = 17.75$$

**Item 3**  $M_{p3} = \frac{\text{the total of students score that answer true item}}{n3}$

$$M_{p3} = \frac{21 + 20 + 21 + 19 + 21 + 15 + 12 + 15 + 9 + 22 + 16 + 19 + 22 + 20 + 17 + 20 + 17 + 20 + 17 + 17 + 21 + 5 + 21 + 18 + 19}{25} = \frac{445}{25} = 17.76$$

**Item 4**  $M_{p4} = \frac{\text{the total of students score that answer true item}}{n4}$

$$M_{p4} = \frac{21 + 20 + 21 + 19 + 21 + 15 + 18 + 15 + 22 + 16 + 19 + 22 + 17 + 14 + 20 + 17 + 20 + 17 + 17 + 5 + 21}{21} = \frac{378}{21} = 18.00$$

**Item 5**  $M_{p5} = \frac{\text{the total of students score that answer true item}}{n5}$

$$M_{p5} = \frac{21 + 20 + 15 + 22 + 19 + 22 + 20 + 20 + 17 + 21 + 12 + 21}{12} = \frac{230}{12} = 19.16$$

**Item 6**  $M_{p6} = \frac{\text{the total of students score that answer true item}}{n6}$

$$M_{p6} = \frac{21 + 20 + 21 + 19 + 21 + 15 + 18 + 15 + 22 + 16 + 19 + 22 + 17 + 20 + 17 + 17 + 21 + 12 + 21 + 18 + 19}{21} = \frac{391}{21} = 18,61$$

**Item 7**  $M_{p7} = \frac{\text{the total of students score that answer true item}}{n7}$

$$M_{p7} = \frac{21 + 20 + 21 + 21 + 15 + 18 + 15 + 9 + 16 + 19 + 22 + 20 + 17 + 14 + 20 + 17 + 20 + 17 + 21 + 12 + 21 + 18 + 19}{23} = \frac{413}{23} = 17.95$$

Item 8  $M_{p8} = \frac{\text{the total of students score that answer true item}}{n8}$

$$M_{p8} = \frac{21 + 20 + 21 + 19 + 7 + 21 + 15 + 12 + 18 + 22 + 16 + 19 + 22 + 20 + 20 + 17 + 21 + 5 + 21 + 18 + 19}{22}$$

$$M_{p8} = \frac{394}{22} = 17.90$$

Item 9  $M_{p9} = \frac{\text{the total of students score that answer true item}}{n9}$

$$M_{p9} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 12 + 18 + 9 + 22 + 16 + 19 + 22 + 20 + 17 + 14 + 20 + 17 + 20 + 17 + 17 + 4 + 21 + 21 + 18 + 19}{26}$$

$$M_{p9} = \frac{461}{26} = 17.73$$

Item 10  $M_{p10} = \frac{\text{the total of students score that answer true item}}{n10}$

$$M_{p10} = \frac{21 + 12 + 15 + 22 + 16 + 22 + 20 + 17 + 20 + 20 + 17 + 21 + 19}{13}$$

$$M_{p10} = \frac{251}{13} = 19.30$$

Item 11  $M_{p11} = \frac{\text{the total of students score that answer true item}}{n11}$

$$M_{p11} = \frac{21 + 20 + 21 + 19 + 21 + 12 + 18 + 22 + 16 + 19 + 22 + 20 + 17 + 14 + 17 + 20 + 17 + 17 + 21 + 12 + 21 + 18}{22}$$

$$M_{p11} = \frac{406}{22} = 18.40$$

Item 12  $M_{p12} = \frac{\text{the total of students score that answer true item}}{n12}$

$$M_{p12} = 21 \frac{20 + 21 + 19 + 21 + 15 + 12 + 18 + 9 + 22 + 19 + 22 + 20 + 17 + 20 + 17 + 20 + 17 + 21 + 21 + 18 + 19}{22}$$

$$M_{p12} = 21 \frac{410}{22} = 18.63$$

Item 13  $M_{p13} = \frac{\text{the total of students score that answer true item}}{n13}$

$$M_{p13} = \frac{21 + 20 + 19 + 21 + 15 + 18 + 15 + 9 + 22 + 19 + 22 + 17 + 20 + 17 + 21 + 21 + 18 + 19}{18}$$

$$M_{p13} = \frac{335}{18} = 18.61$$

$$\text{Item 14 } M_{p14} = \frac{\text{the total of students score that answer true item}}{n14}$$

$$M_{p14} = \frac{21 + 20 + 17 + 17 + 21 + 18}{7}$$

$$M_{p14} = \frac{131}{7} = 18.71$$

$$\text{Item 15 } M_{p15} = \frac{\text{the total of students score that answer true item}}{n15}$$

$$M_{p15} = \frac{21 + 7 + 22 + 20 + 17 + 17 + 17 + 4 + 21 + 5 + 12}{11}$$

$$M_{p15} = \frac{163}{11} = 14.81$$

$$\text{Item 16 } M_{p16} = \frac{\text{the total of students score that answer true item}}{n16}$$

$$M_{p16} = \frac{21 + 20 + 21 + 19 + 21 + 15 + 12 + 18 + 16 + 22 + 20 + 20 + 17 + 14 + 20 + 17 + 20 + 17 + 17 + 21 + 12 + 21 + 18 + 19}{23}$$

$$M_{p16} = \frac{418}{23} = 18.17$$

$$\text{Item 17 } M_{p17} = \frac{\text{the total of students score that answer true item}}{n17}$$

$$M_{p17} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 18 + 15 + 9 + 22 + 16 + 14 + 20 + 17 + 20 + 17 + 12 + 18}{18}$$

$$M_{p17} = \frac{316}{18} = 17.55$$

$$\text{Item 18 } M_{p18} = \frac{\text{the total of students score that answer true item}}{n18}$$

$$M_{p18} = \frac{21 + 20 + 21 + 19 + 21 + 12 + 18 + 22 + 16 + 19 + 22 + 20 + 20 + 17 + 20 + 17 + 17 + 4 + 21 + 12 + 21 + 18 + 19}{23}$$

$$M_{p18} = \frac{417}{23} = 18.13$$

$$\text{Item 19 } M_{p19} = \frac{\text{the total of students score that answer true item}}{n19}$$

$$M_{p19} = \frac{21 + 20 + 21 + 19 + 7 + 21 + 15 + 18 + 15 + 22 + 19 + 22 + 20 + 17 + 20 + 20 + 17 + 17 + 4 + 21 + 12 + 21 + 18 + 19}{24}$$

$$M_{p19} = \frac{426}{24} = 17.75$$

Item 20  $M_{p20} = \frac{\text{the total of students score that answer true item}}{n20}$

$$M_{p20} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 18 + 15 + 22 + 19 + 22 + 20 + 17 + 14 + 17 + 20 + 17 + 21 + 21 + 18 + 19}{21}$$

$$M_{p20} = \frac{398}{21} = 18.95$$

Item 21  $M_{p21} = \frac{\text{the total of students score that answer true item}}{n21}$

$$M_{p21} = \frac{21 + 20 + 19 + 12 + 18 + 15 + 22 + 16 + 19 + 22 + 17 + 14 + 20 + 20 + 17 + 17 + 21 + 12 + 21 + 18 + 19}{21}$$

$$M_{p21} = \frac{380}{21} = 18.09$$

Item 22  $M_{p22} = \frac{\text{the total of students score that answer true item}}{n22}$

$$M_{p22} = \frac{21 + 20 + 21 + 19 + 7 + 21 + 22 + 16 + 19 + 22 + 20 + 20 + 17 + 14 + 20 + 17 + 20 + 17 + 21 + 12 + 21 + 19}{21}$$

$$M_{p22} = \frac{386}{21} = 18.38$$

Item 23  $M_{p23} = \frac{\text{the total of students score that answer true item}}{n23}$

$$M_{p23} = \frac{21 + 21 + 19 + 21 + 15 + 18 + 9 + 22 + 16 + 19 + 22 + 20 + 17 + 14 + 20 + 17 + 20 + 17 + 17 + 21 + 5 + 21 + 18 + 19}{24}$$

$$M_{p23} = \frac{429}{24} = 17.87$$

Item 24  $M_{p24} = \frac{\text{the total of students score that answer true item}}{n24}$

$$M_{p24} = \frac{22 + 20 + 21 + 19 + 7 + 21 + 15 + 12 + 18 + 15 + 9 + 16 + 19 + 22 + 20 + 14 + 20 + 20 + 17 + 21 + 21 + 18 + 19}{23}$$

$$M_{p24} = \frac{406}{23} = 17.65$$



Item 25  $M_{p25} = \frac{\text{the total of students score that answer true item}}{n25}$

$$M_{p25} = \frac{21 + 20 + 21 + 19 + 7 + 21 + 12 + 15 + 9 + 22 + 16 + 19 + 22 + 20 + 17 + 14 + 20 + 20 + 17 + 21 + 21 + 18 + 19}{23}$$

$$M_{p25} = \frac{412}{23} = 17.91$$

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

Item 1  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.94 - 16.63}{5.25} \sqrt{\frac{0.6}{0.4}}$$

$$r = \frac{2.31}{5.25} \sqrt{1.5}$$

$$r = 0.44 \times 1.22 = 0.536$$

Item 2  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.75 - 16.63}{5.25} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.12}{5.25} \sqrt{4}$$

$$r = 0.213 \times 2 = 0.426$$

Item 3  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.75 - 16.63}{5.25} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.13}{5.25} \sqrt{4}$$

$$r = 0.215 \times 2 = 0.430$$

Item 4  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.00 - 16.63}{5.25} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.37}{5.25} \sqrt{2.33}$$

$$r = 0.60 \times 1.52 = 0.396$$

**Item 5**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{19.16 - 16.63}{5.25} \sqrt{\frac{0.4}{0.6}}$$

$$r = \frac{2.53}{5.25} \sqrt{0.66}$$

$$r = 0.481 \times 0.81 = 0.149$$

**Item 6**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.6 - 16.63}{5.25} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.98}{5.25} \sqrt{2.33}$$

$$r = 0.377 \times 1.52 = 0.573$$

**Item 7**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.19 - 16.63}{5.25} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.32}{5.25} \sqrt{4}$$

$$r = 0.351 \times 2 = 0.702$$

**Item 8**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.90 - 16.63}{5.25} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.32}{5.25} \sqrt{2.33}$$

$$r = 0.241 \times 1.52 = 0.367$$

**Item 9**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.73 - 16.63}{5.25} \sqrt{\frac{0.9}{0.1}}$$

$$r = \frac{1.07}{5.25} \sqrt{9}$$

$$r = 0.202 \times 3 = 0.606$$

**Item 10**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{19.30 - 16.63}{5.25} \sqrt{\frac{0.4}{0.6}}$$

$$r = \frac{1.1}{5.25} \sqrt{0.66}$$

$$r = 0.209 \times 0.81 = 0.064$$

**Item 11**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.40 - 16.63}{5.25} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.77}{5.25} \sqrt{2.33}$$

$$r = 0.337 \times 1.52 = 0.512$$

**Item 12**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.63 - 16.63}{5.25} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{2}{5.070} \sqrt{2.33}$$

$$r = 0.380 \times 1.52 = 0.579$$

**Item 13**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.61 - 16.63}{5.25} \sqrt{\frac{0.6}{0.4}}$$

$$r = \frac{1.98}{5.25} \sqrt{1.5}$$

$$r = 0.377 \times 1.22 = 0.460$$

**Item 14**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.71 - 16.63}{5.25} \sqrt{\frac{0.2}{0.8}}$$

$$r = \frac{2.08}{5.25} \sqrt{0.25}$$

$$r = 0.396 \times 0.5 = 0.198$$

**Item 15**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{14.81 - 16.63}{5.25} \sqrt{\frac{0.4}{0.6}}$$

$$r = \frac{-1.82}{5.25} \sqrt{0.66}$$

$$r = -0.346 \times 0.31 = -0.107$$

**Item 16**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.17 - 16.63}{5.25} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.54}{5.25} \sqrt{4}$$

$$r = 0.293 \times 2 = 0.586$$

**Item 17**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.55 - 16.63}{5.25} \sqrt{\frac{0.6}{0.4}}$$

$$r = \frac{0.92}{5.25} \sqrt{1.5}$$

$$r = 0.175 \times 1.22 = 0.213$$

**Item 18**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.13 - 16.63}{5.25} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.5}{5.25} \sqrt{4}$$

$$r = 0.285 \times 2 = 0570$$

**Item 19**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.79 - 16.63}{5.25} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.16}{5.25} \sqrt{4}$$

$$r = 0.220 \times 2 = 0.441$$

**Item 20**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.95 - 16.63}{5.25} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{2.32}{5.25} \sqrt{2.33}$$

$$r = 0.441 \times 1.52 = 0.671$$

**Item 21**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.09 - 16.63}{5.25} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.46}{5.25} \sqrt{2.33}$$

$$r = 0.278 \times 1.52 = 0.422$$

**Item 22**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.38 - 16.63}{5.25} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.75}{5.25} \sqrt{2.33}$$

$$r = 0.333 \times 1.52 = 0.506$$

**Item 23**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.87 - 16.63}{5.25} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.24}{5.25} \sqrt{4}$$

$$r = 0.236 \times 2 = 0.472$$

**Item 24**  $r_{pbt} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbt} = \frac{17.56 - 16.63}{5.25} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.02}{5.25} \sqrt{4}$$

$$r = 0.194 \times 2 = 0.388$$

**Item 25**  $r_{pbt} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbt} = \frac{17.91 - 16.63}{5.25} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.28}{5.25} \sqrt{2.33}$$

$$r = 0.243 \times 1.52 = 0.370$$

## Appendix 11

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

### B Calculation of Post-test

#### 5. Means score from score total ( $M_t$ )

$$M_t = \frac{\sum x_t}{N}$$
$$M_t = \frac{497}{30} = 16.56$$

#### 6. Standard deviation ( $SD_t$ )

$$SD_t = \sqrt{\frac{\sum x_t}{N} - \left(\frac{\sum x_t}{N}\right)^2}$$
$$SD_t = \sqrt{\frac{8997}{30} - \left(\frac{497}{30}\right)^2}$$
$$SD_t = \sqrt{299.9 - 16.56^2}$$
$$SD_t = \sqrt{299.9 - 274.2}$$
$$SD_t = \sqrt{25.7} = 5.070$$

#### 7. Mean score ( $M_p$ )

Item 1  $M_{p1} = \frac{\text{the total of students score that answer true item}}{n1}$

$$M_{p1} = \frac{22 + 21 + 19 + 21 + 15 + 12 + 15 + 22 + 16 + 22 + 20 + 14 + 14 + 20 + 20 + 16 + 23 + 21 + 18 + 20}{19}$$
$$M_{p1} = \frac{351}{19} = 18.47$$

Item 2  $M_{p2} = \frac{\text{the total of students score that answer true item}}{n2}$

$$M_{p2} = \frac{20 + 7 + 15 + 12 + 9 + 22 + 22 + 14 + 16 + 15 + 5 + 5 + 12}{15}$$

$$M_{p2} = \frac{188}{15} = 13.42$$

**Item 3**  $M_{p3} = \frac{\text{the total of students score that answer true item}}{n3}$

$$M_{p3} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 18 + 15 + 22 + 16 + 19 + 22 + 20 + 14 + 14 + 20 + 16 + 20 + 16 + 15 + 23 + 12 + 21 + 18 + 20}{25}$$

$$M_{p3} = \frac{459}{25} = 18.36$$

**Item 4**  $M_{p4} = \frac{\text{the total of students score that answer true item}}{n4}$

$$M_{p4} = \frac{22 + 20 + 21 + 19 + 21 + 18 + 15 + 22 + 16 + 19 + 22 + 20 + 20 + 20 + 16 + 20 + 16 + 15 + 23 + 21 + 18 + 20}{21}$$

$$M_{p4} = \frac{404}{21} = 19.23$$

**Item 5**  $M_{p5} = \frac{\text{the total of students score that answer true item}}{n5}$

$$M_{p5} = \frac{22 + 21 + 7 + 21 + 15 + 12 + 9 + 22 + 14 + 20 + 15 + 23}{12}$$

$$M_{p5} = \frac{201}{12} = 16.75$$

**Item 6**  $M_{p6} = \frac{\text{the total of students score that answer true item}}{n6}$

$$M_{p6} = \frac{22 + 20 + 21 + 19 + 7 + 21 + 15 + 18 + 15 + 22 + 16 + 22 + 20 + 14 + 20 + 16 + 20 + 16 + 15 + 23 + 12 + 21}{22}$$

$$M_{p6} = \frac{395}{22} = 17.95$$

**Item 7**  $M_{p7} = \frac{\text{the total of students score that answer true item}}{n7}$

$$M_{p7} = \frac{22 + 20 + 21 + 19 + 21 + 12 + 18 + 15 + 22 + 16 + 19 + 22 + 20 + 14 + 14 + 20 + 20 + 16 + 15 + 23 + 12 + 21 + 20}{23}$$

$$M_{p7} = \frac{422}{23} = 18.34$$

**Item 8**  $M_{p8} = \frac{\text{the total of students score that answer true item}}{n8}$



$$M_{p8} = \frac{22 + 20 + 21 + 19 + 21 + 18 + 22 + 16 + 19 + 22 + 20 + 14 + 14 + 20 + 16 + 20 + 16 + 23 + 12 + 21 + 18 + 20}{22}$$

$$M_{p8} = \frac{414}{22} = 18.81$$

**Item 9**  $M_{p9} = \frac{\text{the total of students score that answer true item}}{n9}$

$$M_{p9} = \frac{22 + 20 + 21 + 19 + 21 + 12 + 18 + 15 + 9 + 22 + 16 + 19 + 22 + 20 + 14 + 14 + 20 + 16 + 20 + 16 + 4 + 23 + 5 + 21 + 18 + 20}{26}$$

$$M_{p9} = \frac{447}{26} = 17.19$$

**Item 10**  $M_{p10} = \frac{\text{the total of students score that answer true item}}{n10}$

$$M_{p10} = \frac{22 + 20 + 21 + 19 + 21 + 18 + 22 + 16 + 19 + 22 + 20 + 20 + 20 + 23 + 21 + 18 + 20}{17}$$

$$M_{p10} = \frac{342}{17} = 20.11$$

**Item 11**  $M_{p11} = \frac{\text{the total of students score that answer true item}}{n11}$

$$M_{p11} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 18 + 15 + 22 + 16 + 19 + 22 + 20 + 16 + 20 + 15 + 23 + 12 + 21 + 18 + 20}{22}$$

$$M_{p11} = \frac{415}{22} = 18.86$$

**Item 12**  $M_{p12} = \frac{\text{the total of students score that answer true item}}{n12}$

$$M_{p12} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 12 + 18 + 22 + 16 + 19 + 22 + 20 + 14 + 20 + 16 + 20 + 23 + 12 + 21 + 18 + 20}{22}$$

$$M_{p12} = \frac{411}{22} = 18.68$$

**Item 13**  $M_{p13} = \frac{\text{the total of students score that answer true item}}{n13}$

$$M_{p13} = \frac{22 + 7 + 15 + 16 + 14 + 14 + 16}{7}$$

$$M_{p13} = \frac{104}{7} = 14.85$$

**Item 14**  $M_{p14} = \frac{\text{the total of students score that answer true item}}{n14}$

$$M_{p14} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 22 + 19 + 22 + 20 + 20 + 16 + 20 + 16 + 23 + 21 + 18 + 20}{18}$$

$$M_{p14} = \frac{355}{18} = 19.72$$

Item 15  $M_{p15} = \frac{\text{the total of students score that answer true item}}{n15}$

$$M_{p15} = \frac{18 + 15 + 19 + 22 + 14 + 16 + 15 + 4 + 23 + 5 + 12}{11}$$

$$M_{p15} = \frac{163}{11} = 14.81$$

Item 16  $M_{p16} = \frac{\text{the total of students score that answer true item}}{n16}$

$$M_{p16} = \frac{22 + 20 + 21 + 19 + 7 + 21 + 15 + 9 + 22 + 16 + 19 + 22 + 20 + 20 + 16 + 20 + 16 + 15 + 23 + 12 + 21 + 18 + 20}{23}$$

$$M_{p16} = \frac{414}{23} = 18$$

Item 17  $M_{p17} = \frac{\text{the total of students score that answer true item}}{n17}$

$$M_{p17} = \frac{22 + 20 + 21 + 19 + 21 + 18 + 15 + 9 + 22 + 19 + 22 + 20 + 14 + 16 + 23 + 21 + 18 + 20}{18}$$

$$M_{p17} = \frac{340}{18} = 24.44$$

Item 18  $M_{p18} = \frac{\text{the total of students score that answer true item}}{n18}$

$$M_{p18} = \frac{22 + 20 + 21 + 19 + 21 + 18 + 9 + 22 + 16 + 19 + 22 + 20 + 14 + 14 + 20 + 16 + 20 + 16 + 15 + 23 + 5 + 12 + 21 + 20}{23}$$

$$M_{p18} = \frac{404}{23} = 17.56$$

Item 19  $M_{p19} = \frac{\text{the total of students score that answer true item}}{n19}$

$$M_{p19} = \frac{22 + 20 + 21 + 19 + 21 + 12 + 18 + 15 + 9 + 22 + 16 + 19 + 22 + 20 + 14 + 20 + 16 + 20 + 15 + 23 + 5 + 12 + 21 + 18 + 20}{24}$$

$$M_{p19} = \frac{447}{24} = 18.62$$

Item 20  $M_{p20} = \frac{\text{the total of students score that answer true item}}{n20}$

$$M_{p20} = \frac{21 + 19 + 21 + 15 + 12 + 18 + 9 + 22 + 16 + 19 + 22 + 20 + 14 + 14 + 20 + 20 + 15 + 23 + 21 + 18 + 20}{21}$$

$$M_{p20} = \frac{379}{21} = 18.04$$

**Item 21**  $M_{p21} = \frac{\text{the total of students score that answer true item}}{n21}$

$$M_{p20} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 12 + 18 + 15 + 22 + 16 + 19 + 22 + 20 + 14 + 14 + 20 + 16 + 20 + 16 + 15 + 23 + 21 + 18 + 20}{25}$$

$$M_{p20} = \frac{459}{25} = 18.36$$

**Item 22**  $M_{p22} = \frac{\text{the total of students score that answer true item}}{n22}$

$$M_{p20} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 12 + 18 + 9 + 22 + 19 + 22 + 20 + 20 + 16 + 20 + 15 + 23 + 12 + 21 + 18 + 20}{22}$$

$$M_{p20} = \frac{405}{22} = 18.40$$

**Item 23**  $M_{p23} = \frac{\text{the total of students score that answer true item}}{n23}$

$$M_{p20} = \frac{22 + 20 + 21 + 21 + 12 + 14 + 20 + 20 + 4 + 23 + 21 + 18 + 20}{13}$$

$$M_{p20} = \frac{245}{13} = 18.84$$

**Item 24**  $M_{p24} = \frac{\text{the total of students score that answer true item}}{n24}$

$$M_{p20} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 18 + 15 + 22 + 19 + 22 + 20 + 14 + 20 + 16 + 20 + 16 + 15 + 23 + 5 + 21 + 18 + 20}{23}$$

$$M_{p20} = \frac{422}{23} = 18.34$$

**Item 25**  $M_{p25} = \frac{\text{the total of students score that answer true item}}{n25}$

$$M_{p20} = \frac{22 + 20 + 21 + 19 + 21 + 15 + 12 + 18 + 15 + 22 + 19 + 22 + 20 + 14 + 14 + 20 + 16 + 20 + 16 + 23 + 21 + 18 + 20}{23}$$

$$M_{p20} = \frac{428}{23} = 18.60$$

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

**Item 1**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.47 - 16.56}{5.070} \sqrt{\frac{0.6}{0.4}}$$

$$r = \frac{1.91}{5.070} \sqrt{1.5}$$

$$r = 0.376 \times 1.22 = 0.459$$

**Item 2**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{13.42 - 16.56}{5.070} \sqrt{\frac{0.4}{0.6}}$$

$$r = \frac{-3.14}{5.070} \sqrt{0.66}$$

$$r = -0.619 \times 0.81 = -0.501$$

**Item 3**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.36 - 16.56}{5.070} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.8}{5.070} \sqrt{4}$$

$$r = 0.355 \times 2 = 0.710$$

**Item 4**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{19.23 - 16.56}{5.070} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{2.67}{5.070} \sqrt{2.33}$$

$$r = 0.526 \times 1.52 = 0.800$$

**Item 5**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{16.75 - 16.56}{5.070} \sqrt{\frac{0.4}{0.6}}$$

$$r = \frac{0.19}{5.070} \sqrt{0.66}$$

$$r = 0.037 \times 0.81 = 0.030$$

**Item 6**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.95 - 16.56}{5.070} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.39}{5.070} \sqrt{2.33}$$

$$r = 0.274 \times 1.52 = 0.416$$

**Item 7**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.34 - 16.56}{5.070} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.78}{5.070} \sqrt{4}$$

$$r = 0.351 \times 2 = 0.702$$

**Item 8**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.81 - 16.56}{5.070} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{2.25}{5.070} \sqrt{2.33}$$

$$r = 0.443 \times 1.52 = 0.674$$

**Item 9**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.19 - 16.56}{5.070} \sqrt{\frac{0.9}{0.1}}$$

$$r = \frac{0.63}{5.070} \sqrt{9}$$

$$r = 0.124 \times 3 = 0.372$$

**Item 10**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{20.11 - 16.56}{5.070} \sqrt{\frac{0.5}{0.5}}$$

$$r = \frac{3.55}{5.070} \sqrt{1}$$

$$r = 0.700 \times 1 = 0.700$$

**Item 11**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.86 - 16.56}{5.070} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{2.3}{5.070} \sqrt{2.33}$$

$$r = 0.453 \times 1.52 = 0.688$$

**Item 12**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.68 - 16.56}{5.070} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{2.12}{5.070} \sqrt{2.33}$$

$$r = 0.418 \times 1.52 = 0.635$$

**Item 13**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{14.85 - 16.56}{5.070} \sqrt{\frac{0.2}{0.8}}$$

$$r = \frac{-1.71}{5.070} \sqrt{0.25}$$

$$r = -0.337 \times 0.5 = 0.168$$

**Item 14**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{19.62 - 16.56}{5.070} \sqrt{\frac{0.6}{0.4}}$$

$$r = \frac{3.06}{5.070} \sqrt{1.5}$$

$$r = 0.603 \times 1.22 = 0.735$$

**Item 15**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{14.81 - 16.56}{5.070} \sqrt{\frac{0.4}{0.6}}$$

$$r = \frac{-1.75}{5.070} \sqrt{0.66}$$

$$r = -0.345 \times 0.81 = -0.279$$

**Item 16**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18 - 16.56}{5.070} \sqrt{\frac{0.8}{0.2}}$$
$$r = \frac{1.44}{5.070} \sqrt{4}$$
$$r = 0.284 \times 2 = 0.568$$

**Item 17**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{24.44 - 16.56}{5.070} \sqrt{\frac{0.6}{0.4}}$$
$$r = \frac{7.88}{5.070} \sqrt{1.5}$$
$$r = 1.55 \times 1.22 = 1.89$$

**Item 18**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{17.5 - 16.56}{5.070} \sqrt{\frac{0.8}{0.2}}$$
$$r = \frac{1}{5.070} \sqrt{4}$$
$$r = 0.197 \times 2 = 0.394$$

**Item 19**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.62 - 16.56}{5.070} \sqrt{\frac{0.8}{0.2}}$$
$$r = \frac{2.06}{5.070} \sqrt{4}$$
$$r = 0.406 \times 2 = 0.812$$

**Item 20**  $r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$

$$r_{pbi} = \frac{18.04 - 16.56}{5.070} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.48}{5.070} \sqrt{2.33}$$

$$r = 0.291 \times 1.52 = 0.443$$

$$\text{Item 21 } r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.36 - 16.56}{5.070} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.8}{5.070} \sqrt{4}$$

$$r = 0.355 \times 2 = 0.710$$

$$\text{Item 22 } r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.40 - 16.56}{5.070} \sqrt{\frac{0.7}{0.3}}$$

$$r = \frac{1.84}{5.070} \sqrt{2.33}$$

$$r = 0.362 \times 1.52 = 0.551$$

$$\text{Item 23 } r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.84 - 16.56}{5.070} \sqrt{\frac{0.4}{0.6}}$$

$$r = \frac{2.28}{5.070} \sqrt{0.66}$$

$$r = 0.449 \times 0.81 = 0.364$$

$$\text{Item 24 } r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$$

$$r_{pbi} = \frac{18.34 - 16.56}{5.070} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{1.78}{5.070} \sqrt{4}$$

$$r = 0.351 \times 2 = 0.702$$

$$\text{Item 25 } r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$$



$$r_{pbi} = \frac{18.60 - 16.56}{5.070} \sqrt{\frac{0.8}{0.2}}$$

$$r = \frac{2.04}{5.070} \sqrt{4}$$

$$r = 0.402 \times 2 = 0.804$$

Appendix 12

Test Validity of Pre-Test

Number of Item	$M_p$	$M_t$	$SD_t$	p	q	$r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$	$r_t$ on 5% significant	Interpretation
1	18.94	16.63	5.25	0.6	0.4	0.536	0.361	Valid
2	17.74	16.63	5.25	0.8	0.2	0.426	0.361	Valid
3	17.76	16.63	5.25	0.8	0.2	0.430	0.361	Valid
4	18.00	16.63	5.25	0.7	0.3	0.396	0.361	Valid
5	19.16	16.63	5.25	0.4	0.6	0.149	0.361	Invalid
6	18.61	16.63	5.25	0.7	0.3	0.573	0.361	Valid
7	17.95	16.63	5.25	0.8	0.2	0.502	0.361	Valid
8	17.90	16.63	5.25	0.7	0.3	0.367	0.361	Valid
9	17.73	16.63	5.25	0.9	0.1	0.606	0.361	Valid
10	19.30	16.63	5.25	0.4	0.6	0.064	0.361	Invalid
11	18.40	16.63	5.25	0.7	0.3	0.512	0.361	Valid
12	18.63	16.63	5.25	0.7	0.3	0.579	0.361	Valid
13	18.61	16.63	5.25	0.6	0.4	0.460	0.361	Valid
14	18.71	16.63	5.25	0.2	0.8	0.198	0.361	Invalid
15	14.81	16.63	5.25	0.4	0.6	0.107	0.361	Invalid
16	18.17	16.63	5.25	0.8	0.2	0.586	0.361	Valid
17	17.55	16.63	5.25	0.6	0.4	0.213	0.361	Invalid
18	18.13	16.63	5.25	0.8	0.2	0.570	0.361	Valid
19	17.75	16.63	5.25	0.8	0.2	0.441	0.361	Valid
20	18.95	16.63	5.25	0.7	0.3	0.671	0.361	Valid
21	18.09	16.63	5.25	0.7	0.3	0.422	0.361	Valid
22	18.38	16.63	5.25	0.7	0.3	0.506	0.361	Valid
23	17.87	16.63	5.25	0.8	0.2	0.472	0.361	Valid
24	17.65	16.63	5.25	0.8	0.2	0.388	0.361	Valid
25	17.91	16.63	5.25	0.7	0.3	0.370	0.361	Valid

Appendix 13

Test Validity of Post-Test

Number of Item	$M_p$	$M_t$	$SD_t$	p	q	$r_{pbi} = \frac{M_p - M_t}{SD_t} \sqrt{\frac{p}{q}}$	$r_t$ on 5% significant	Interpretation
1	18.47	16.56	5.07	0.6	0.4	0.459	0.361	Valid
2	13.42	16.56	5.07	0.4	0.6	-0.501	0.361	Invalid
3	18.36	16.56	5.07	0.8	0.2	0.710	0.361	Valid
4	19.23	16.56	5.07	0.8	0.2	0.800	0.361	Valid
5	16.75	16.56	5.07	0.4	0.6	0.030	0.361	Invalid
6	17.95	16.56	5.07	0.7	0.3	0.416	0.361	Valid
7	18.34	16.56	5.07	0.8	0.2	0.702	0.361	Valid
8	18.81	16.56	5.07	0.7	0.3	0.674	0.361	Valid
9	17.19	16.56	5.07	0.9	0.2	0.372	0.361	Valid
10	20.11	16.56	5.07	0.5	0.5	0.700	0.361	Valid
11	18.86	16.56	5.07	0.7	0.3	0.688	0.361	Valid
12	18.68	16.56	5.07	0.7	0.3	0.635	0.361	Valid
13	14.85	16.56	5.07	0.2	0.8	-0.168	0.361	Invalid
14	19.62	16.56	5.07	0.6	0.4	0.735	0.361	Valid
15	14.81	16.56	5.07	0.4	0.6	-0.279	0.361	Invalid
16	18	16.56	5.07	0.8	0.2	0.568	0.361	Valid
17	24.44	16.56	5.07	0.6	0.4	1.86	0.361	Valid
18	17.56	16.56	5.07	0.8	0.2	0.394	0.361	Valid
19	18.62	16.56	5.07	0.8	0.2	0.812	0.361	Valid
20	18.04	16.56	5.07	0.7	0.3	0.443	0.361	Valid
21	18.36	16.56	5.07	0.8	0.2	0.701	0.361	Valid
22	18.40	16.56	5.07	0.7	0.3	0.551	0.361	Valid
23	18.84	16.56	5.07	0.4	0.6	0.364	0.361	Invalid
24	18.34	16.56	5.07	0.8	0.2	0.702	0.361	Valid
25	18.60	16.56	5.07	0.8	0.2	0.804	0.361	Valid

## Appendix 14

### Calculation Reliability Pre-test

$$R_{11} = \left( \frac{n}{n-1} \right) \left( \frac{S_{t^2} - \Sigma pq}{S_{t^2}} \right)$$

$$N = 30$$

$$\Sigma Xt = 499$$

$$\Sigma xt^2 = 9120$$

$$\Sigma pq = 4.86$$

$$\begin{aligned} s_{t^2} &= \Sigma xt^2 - \left( \frac{\Sigma xt}{N} \right)^2 \\ &= 9120 - \left( \frac{499}{30} \right)^2 = 9120 - \frac{249001}{30} = 9120 - 8300 = 820 \end{aligned}$$

$$s_{t^2} = \frac{\Sigma xt^2}{N} = \frac{820}{30}$$

$$s_{t^2} = 27.33$$

$$R_{11} = \left( \frac{n}{n-1} \right) \left( \frac{S_{t^2} - \Sigma pq}{S_{t^2}} \right)$$

$$R_{11} = \left( \frac{30}{30-1} \right) \left( \frac{27.33 - 4.86}{27.33} \right) = \left( \frac{30}{29} \right) \left( \frac{22.47}{27.33} \right)$$

$$= (1.03) (0.82)$$

$$= 0.84 \text{ (} r_{11} > 0.70 = \text{reliable)}$$

Test is reliable if  $r_{\text{count}} > r_{\text{table}}$ . Based on calculation above, the test have very high reliable.

## Appendix 15

### Calculation Reliability Post-test

$$R_{11} = \left( \frac{n}{n-1} \right) \left( \frac{S_{t^2} - \Sigma pq}{S_{t^2}} \right)$$

$$N = 30$$

$$\Sigma Xt = 497$$

$$\Sigma xt^2 = 8997$$

$$\Sigma pq = 4.89$$

$$\begin{aligned} s_{t^2} &= \Sigma xt^2 - \left( \frac{\Sigma xt}{N} \right)^2 \\ &= 8997 - \left( \frac{497}{30} \right)^2 = 8997 - \frac{247009}{30} = 8997 - 8233 = 764 \end{aligned}$$

$$s_{t^2} = \frac{\Sigma xt^2}{N} = \frac{764}{30}$$

$$s_{t^2} = 25.46$$

$$R_{11} = \left( \frac{n}{n-1} \right) \left( \frac{S_{t^2} - \Sigma pq}{S_{t^2}} \right)$$

$$R_{11} = \left( \frac{30}{30-1} \right) \left( \frac{25.46 - 4.89}{25.46} \right) = \left( \frac{30}{29} \right) \left( \frac{20.57}{25.46} \right)$$

$$= (1.03) (0.807)$$

$$= 0.832 \text{ (} r_{11} > 0.70 = \text{reliable)}$$

Test is reliable if  $r_{\text{count}} > r_{\text{table}}$ . Based on calculation above, the test have very high reliable.

## Appendix 16

### Score of Experimental Class and Control Class on Pre Test

#### 1. Score of Experimental Class Pre Test before Using Intensive Reading Strategy

	The Initial Name of Students (n)	Pre-Test
1.	Abdi Setiawan	30
2.	Auliansyah Raja	55
3.	Bunga Lestari	30
4.	Dina Adelia Siregar	30
5.	Dini Aulia Putri	30
6.	Falah Hayati	50
7.	Fathul Rahman	35
8.	Fitrah Martua Raja	40
9.	Fitri Ritonga	40
10.	Filzah Nur Adina	65
11.	Fito Riski	35
12.	Giska Adzira	40
13.	Hema Paulina	50
14.	Indah Maharani	50
15.	Mawaddah Ayunda Fikry	75
16.	Medyta Elmanda	35
17.	Nur Aisyah	30
18.	Nur Mawaddah Sari	55
19.	Rio Adian Juanda	45
20.	Ripai Hidayat	40
21.	Riska Putri	35
22.	Riyan Hidan Raihan	75
23.	Riris Hutapea	55
24.	Salniati	45
25.	Salsabila Annisa	40
26.	Sofa Marwah	70
27.	Surya Saputra	35
28.	Syfa Salsabilla	50
29.	Sohirah Yolanda	45
30.	Ahmad Fadillah	40
<b>TOTAL</b>		<b>1350</b>



## 2. Score of Control Class Pre Test

No	The Initial Name of Students (n)	Pre-Test
1.	Akbar Kurniawan	65
2.	Aldi Mirza Gaswan	40
3.	Andreas Perdana	60
4.	Ananda Ditha Fadila	35
5.	Ardian Syaputra	40
6.	Astrid	60
7.	Difa Syafinah	25
8.	Ega Tri Agustin	25
9.	Elista Nahampun	45
10.	Fadillah Ismi	55
11.	Febrisa Pulungan	45
12.	Indah Suriani	80
13.	Julia Asyah	40
14.	Julpan Pratama	35
15.	Marisa	70
16.	Mulyadi Gusnawi	50
17.	Muhammad Forka	40
18.	Nadia	40
19.	Nurhalimah	30
20.	Nur Azlina Fitri Ani	30
21.	Padinur Hutapea	55
22.	Prendi	25
23.	Ramadhani Nasution	30
24.	Rima Mawaddah	35
25.	Saima Ritonga	45
26.	Sabina Aulia Nazwa	45
27.	Sahrina Ramadhani	70
28.	Sheila Puspita Sari	45
29.	Winda Sari	50
30.	Wildan	50
<b>TOTAL</b>		<b>1360</b>

## Appendix 17

### Score of Experimental Class and Control Class on Post Test

#### 1. Score of Experimental Class Post Test after Using Intensive Reading Strategy

No	The Initial Name of Students (n)	Post-Test
1.	Abdi Setiawan	50
2.	Auliansyah Raja	85
3.	Bunga Lestari	60
4.	Dina Adelia Siregar	60
5.	Dini Aulia Putri	55
6.	Falah Hayati	80
7.	Fathul Rahman	65
8.	Fitrah Martua Raja	80
9.	Fitri Ritonga	80
10.	Filzah Nur Adina	90
11.	Fito Riski	70
12.	Giska Adzira	80
13.	Hema Paulina	80
14.	Indah Maharani	80
15.	Mawaddah Ayunda Fikry	90
16.	Medyta Elmanda	70
17.	Nur Aisyah	50
18.	Nur Mawaddah Sari	90
19.	Rio Adian Juanda	80
20.	Ripai Hidayat	80
21.	Riska Putri	70
22.	Riyan Hidan Raihan	90
23.	Riris Hutapea	85
24.	Salniati	80
25.	Salsabila Annisa	75
26.	Sofa Marwah	90
27.	Surya Saputra	75
28.	Syfa Salsabilla	80
29.	Sohirah Yolanda	80
30.	Ahmad Fadillah	80
<b>TOTAL</b>		<b>2280</b>

## 2. Score of Control Class Post Test

No	The Initial Name of Students (n)	Post-Test
1.	Akbar Kurniawan	75
2.	Aldi Mirza Gaswan	50
3.	Andrean Perdana	70
4.	Ananda Ditha Fadila	40
5.	Ardian Syaputra	50
6.	Astrid	70
7.	Difa Syafinah	35
8.	Ega Tri Agustin	35
9.	Elista Nahampun	55
10.	Fadillah Ismi	70
11.	Febrisa Pulungan	60
12.	Indah Suriani	80
13.	Julia Asyah	50
14.	Julpan Pratama	45
15.	Marisa	80
16.	Mulyadi Gusnawi	60
17.	Muhammad Forka	45
18.	Nadia	45
19.	Nurhalimah	40
20.	Nur Azlina Fitri Ani	40
21.	Padinur Hutapea	65
22.	Prendi	25
23.	Ramadhani Nasution	35
24.	Rima Mawaddah	40
25.	Saima Ritonga	55
26.	Sabina Aulia Nazwa	55
27.	Sahrina Ramadhani	75
28.	Sheila Puspita Sari	55
29.	Winda Sari	60
30.	Wildan	60
<b>TOTAL</b>		1620

## Appendix 18

### HOMOGENEITY TEST (PRE-TEST)

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

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

Hypotheses:

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

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

A. Variant of the VIII-1 class is:

NO	Xi	Xi <sup>2</sup>
1.	30	900
2.	30	900
3.	30	900
4.	30	900
5.	30	900
6.	35	1225
7.	35	1225
8.	35	1225
9.	35	1225
10.	35	1225
11.	40	1600
12.	40	1600
13.	40	1600
14.	40	1600
15.	40	1600
16.	40	1600
17.	45	2025
18.	45	2025
19.	45	2025
20.	50	2500
21.	50	2500

22.	50	2500
23.	50	2500
24.	55	3025
25.	55	3025
26.	55	3025
27.	65	4225
28.	70	4900
29.	75	5625
30.	75	5625
	1350	65750

$$n = 30$$

$$\sum xi = 1350$$

$$\sum xi^2 = 65750$$

So:

$$\begin{aligned}
 S^2 &= \frac{n\sum xi^2 - (\sum xi)^2}{n(n-1)} \\
 &= \frac{30(65750) - (1350)^2}{30(30-1)} \\
 &= \frac{1972500 - 1822500}{30(29)} \\
 &= \frac{150000}{870} \\
 &= 172.41
 \end{aligned}$$

B. Variant of the VIII-2 class is:

NO	Xi	Xi <sup>2</sup>
1.	25	625
2.	25	900
3.	25	900
4.	30	1225
5.	30	1225
6.	30	1225
7.	35	1600
8.	35	2025
9.	35	2025
10.	40	2025

11.	40	2500
12.	40	2500
13.	40	3025
14.	40	3025
15.	45	3025
16.	45	3025
17.	45	3025
18.	45	3025
19.	45	3025
20.	50	3600
21.	50	4225
22.	50	4225
23.	55	4225
24.	55	4900
25.	60	4900
26.	60	4900
27.	65	6400
28.	70	6400
29.	70	6400
30.	80	6400
	1360	67150

$$N = 30$$

$$\sum xi = 1360$$

$$\sum xi^2 = 67150$$

So:

$$\begin{aligned}
 S^2 &= \frac{n\sum xi^2 - (\sum xi)^2}{n(n-1)} \\
 &= \frac{30(67150) - (1360)^2}{30(30-1)} \\
 &= \frac{2014500 - 1849600}{30(29)} \\
 &= \frac{164900}{870} \\
 &= 189.54
 \end{aligned}$$

C. Variant of the VIII-4 class is:

NO	Xi	Xi <sup>2</sup>
----	----	-----------------

1	20	1225
2	20	1225
3	25	1600
4	25	2500
5	25	3025
6	30	3025
7	35	3025
8	40	3025
9	40	3025
10	40	3025
11	40	3025
12	45	3025
13	45	3600
14	50	3600
15	50	4225
16	55	4225
17	55	4225
18	55	4225
19	60	4225
20	60	4225
21	65	4225
22	70	4225
23	75	4900
24	75	4900
	1100	56450

$$N = 24$$

$$\sum xi = 1100$$

$$\sum xi^2 = 56450$$

So:

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

$$= \frac{24(56450) - (1100)^2}{24(24-1)}$$

$$= \frac{1354800 - 1210000}{24(23)}$$

$$= \frac{189.54}{552}$$

$$= 262.31$$

The Formula was used to test hypothesis was:

1. VIII-1 and VIII-2 :

$$F = \frac{\textit{TheBiggestVariant}}{\textit{TheSmallestVariant}}$$

So:

$$F = \frac{189.54}{172.41}$$
$$= 1.09$$

After doing the calculation, researcher found that  $F_{\text{count}} = 1.09$  with  $\alpha 5\%$  and  $dk = 29$  and  $29$  from the distribution list F, researcher found that  $F_{\text{table}} = 1.88$ , cause  $F_{\text{count}} < F_{\text{table}}$  ( $1.09 < 1.88$ ). So, there is no difference the variant between the VIII-1 class and VIII-2 class. It means that the variant is homogenous.

2. VIII-1 and VIII-3 :

$$F = \frac{\textit{TheBiggestVariant}}{\textit{TheSmallestVariant}} \text{So:}$$

$$F = \frac{262.31}{172.41} = 1.52$$

After doing the calculation, researcher found that  $F_{\text{count}} = 1.52$  with  $\alpha 5\%$  and  $dk = 29$  and  $23$  from the distribution list F, researcher found that  $F_{\text{table}} = 1.88$ , cause  $F_{\text{count}} < F_{\text{table}}$  ( $1.52 < 1.88$ ). So, there is no difference the variant between the VIII-1 class and VIII-3 class. It means that the variant is homogenous.

3. VIII-2 and VIII-3 :

$$F = \frac{\textit{TheBiggestVariant}}{\textit{TheSmallestVariant}}$$

So:



$$F = \frac{262.31}{189.54}$$
$$= 1.38$$

After doing the calculation, researcher found that  $F_{\text{count}} = 1.38$  with  $\alpha 5\%$  and  $dk = 29$  and  $23$  from the distribution list  $F$ , researcher found that  $F_{\text{table}} = 1.88$ , cause  $F_{\text{count}} < F_{\text{table}}$  ( $1.38 < 1.88$ ). So, there is no difference the variant between the VIII-2class and VIII-3 class. It means that the variant is homogenous.

## Appendix 19

### HOMOGENEITY TEST (POST-TEST)

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

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

Hypotheses:

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

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

D. Variant of the VIII-2 class is:

NO	Xi	Xi <sup>2</sup>
31.	50	2500
32.	50	2500
33.	55	3025
34.	60	3600
35.	60	3600
36.	65	4225
37.	70	4900
38.	70	4900
39.	70	4900
40.	75	5625
41.	75	5625
42.	80	6400
43.	80	6400
44.	80	6400
45.	80	6400
46.	80	6400
47.	80	6400
48.	80	6400
49.	80	6400
50.	80	6400
51.	80	6400

52.	80	6400
53.	80	6400
54.	85	7225
55.	85	7225
56.	90	8100
57.	90	8100
58.	90	8100
59.	90	8100
60.	90	8100
	2280	177150

$$n = 30$$

$$\sum xi = 2280$$

$$\sum_{xi} 2 = 177150$$

So:

$$\begin{aligned}
 S^2 &= \frac{n\sum xi^2 - (\sum xi)^2}{n(n-1)} \\
 &= \frac{30(177150) - (2280)^2}{30(30-1)} \\
 &= \frac{6681275 - 6630625}{30(29)} \\
 &= \frac{116100}{870} \\
 &= 133.44
 \end{aligned}$$

E. Variant of the VIII-3 class is:

NO	Xi	Xi <sup>2</sup>
31.	30	900
32.	30	900
33.	35	1225
34.	35	1225
35.	40	1600
36.	40	1600
37.	40	1600
38.	40	1600
39.	45	2025
40.	45	2025

41.	45	2025
42.	50	2500
43.	50	2500
44.	50	2500
45.	55	3025
46.	55	3025
47.	55	3025
48.	55	3025
49.	60	3600
50.	60	3600
51.	60	3600
52.	65	4225
53.	65	4225
54.	70	4900
55.	70	4900
56.	70	4900
57.	75	5625
58.	75	5625
59.	80	6400
60.	80	6400
	1625	94235

$$N = 30$$

$$\sum xi = 1625$$

$$\sum_{xi}^2 = 94235$$

So:

$$\begin{aligned}
 S^2 &= \frac{n\sum xi^2 - (\sum xi)^2}{n(n-1)} \\
 &= \frac{30(94235) - (1625)^2}{30(30-1)} \\
 &= \frac{2827050 - 2640625}{30(29)} \\
 &= \frac{186425}{870} \\
 &= 214.28
 \end{aligned}$$

The Formula was used to test hypothesis was:

4. VIII-1 and VIII-2:

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

So:

$$F = \frac{214.28}{133.44}$$
$$= 1.60$$

After doing the calculation, researcher found that  $F_{\text{count}} = 1.60$  with  $\alpha 5\%$  and  $dk = 29$  and  $29$  from the distribution list  $F$ , researcher found that  $F_{\text{table}} = 1.88$ , cause  $F_{\text{count}} < F_{\text{table}}$  ( $1.60 < 1.88$ ). So, there is no difference the variant between the VIII-1 class and VIII-2 class. It means that the variant is homogenous.

## Appendix 20

### RESULT OF NORMALITY TEST IN PRE TEST

#### RESULT OF THE NORMALITY TEST OF VIII-1 IN PRE-TEST

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

30	30	30	30	30	35	35	35	35	35
40	40	40	40	40	40	45	45	45	50
50	50	50	55	55	55	65	70	75	75

2. High = 75

Low = 30

Range = High – Low

= 75 - 30

= 45

3. Total of Classes =  $1 + 3,3 \log (n)$

=  $1 + 3,3 \log (30)$

=  $1 + 3,3 (1.47)$

=  $1 + 4.85$

= 5.85

= 6

4. Length of Classes =  $\frac{range}{totalofclass} = \frac{45}{6} = 7.5 = 8$

5. Mean

Interval Class	F	X	x	fx	x <sup>2</sup>	fx <sup>2</sup>
30 – 37	10	33	+2	20	4	40
38 – 45	9	41	+1	9	1	9
<b>46 – 53</b>	<b>4</b>	<b>49</b>	0	0	0	0
54 – 61	3	57	-1	-3	1	3
62 – 69	1	65	-2	-2	4	4
70 – 78	3	74	-3	-9	9	27
<i>i</i> = 9	30	-	-	15	-	83

$$\begin{aligned}
M_x &= M^1 + i \frac{\sum fx^1}{N} \\
&= 49 + 8 \left( \frac{15}{30} \right) \\
&= 49 + 8 (0.5) \\
&= 49 + 4 \\
&= 53
\end{aligned}$$

$$\begin{aligned}
SD_t &= i \sqrt{\frac{\sum fx^2}{n} - \left( \frac{\sum fx^1}{n} \right)^2} \\
&= 8 \sqrt{\frac{83}{30} - \left( \frac{15}{30} \right)^2} \\
&= 8 \sqrt{2.766 - (0.5)^2} \\
&= 8 \sqrt{2.766 - 0.25} \\
&= 8 \sqrt{2.51} \\
&= 8 \times 1.58 \\
&= 12.64
\end{aligned}$$

Table of Normality Data Test with Chi Kuadrat 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 - 78	78.5	2.01	0.4778				
				0.07	2.1	3	0.42
62 - 69	69.5	1.30	0.4032				
				0.15	4.5	1	-0.77
54 - 61	61.5	0.67	0.2486				
				0.23	6.9	3	-0.56
46 - 53	53.5	0.03	0.0120				
				-0.26	-7.8	4	-1.51
38 - 45	45.5	-0.59	0.27760				
				0.16	4.8	9	-0.87
30 - 37	37.5	-1.22	0.11123				
				0.07	2.1	10	3.76
	29.5	-1.85	0.03216				
						$X^2$	2.21

Based on the table above, the reseracher found that  $x^2_{\text{count}} = 2.21$  while  $x^2_{\text{table}} = 11.070$  cause  $x^2_{\text{count}} < x^2_{\text{table}}$   $2.21 < 11.070$ ) with degree of freedom (dk) =  $6-1 = 5$  and significant level  $\alpha = 5\%$ . So distribution of VIII-1class (pre-test) is normal.

#### 6. Median

No	Interval	F	Fk
1	30 – 37	10	10
2	38 – 45	9	19
3	<b>46 – 53</b>	<b>4</b>	23
4	54 – 61	3	26
5	62 – 69	1	27
6	70 – 78	3	30

Position of Me in the interval of classes is number 4, that:

$$Bb = 45.5$$

$$F = 9$$

$$fm = 4$$

$$i = 8$$

$$n = 30$$

$$1/2n = 15$$

So :

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

$$= 45.5 + 8 \left( \frac{15-9}{4} \right)$$

$$= 45.5 + 8 (1.5)$$

$$= 45.5 + 12$$

$$= 57.5$$



## 7. Modus

No	Interval	F	Fk
1	30 – 37	10	3
2	38 – 45	9	8
3	<b>46 – 53</b>	<b>4</b>	13
4	54 – 61	3	22
5	62 – 69	1	26
6	70 – 78	3	29

$$M_o = L + \frac{d_1}{d_1 + d_2} i$$

$$L = 45.5$$

$$d_1 = -5$$

$$d_2 = 1$$

$$i = 8$$

So,

$$\begin{aligned} M_o &= 45.5 + \frac{-5}{-5+1} 8 \\ &= 45.5 + 1.25 (8) \\ &= 45.5 + 10 \\ &= 55.5 \end{aligned}$$

### RESULT OF NORMALITY TEST IN PRE TEST

#### RESULT OF THE NORMALITY TEST OF VIII-2 IN PRE-TEST

- The score of VIII-2 class in pre test from low score to high score:

25	25	25	30	30	30	30	35	35	35
40	40	40	40	40	45	45	45	45	45
50	50	50	55	55	60	60	65	70	80

- High = 80

Low = 25

Range = High – Low

= 80 - 25

$$= 55$$

$$\begin{aligned}
 3. \text{ Total of Classes} &= 1 + 3,3 \log (n) \\
 &= 1 + 3,3 \log (30) \\
 &= 1 + 3,3 (1.477) \\
 &= 1 + 4.874 \\
 &= 5.874 \\
 &= 6
 \end{aligned}$$

$$4. \text{ Length of Classes} = \frac{\text{range}}{\text{totalofclass}} = \frac{55}{6} = 9.17 = 9$$

5. Mean

Interval Class	F	X	x	fx	x <sup>2</sup>	fx <sup>2</sup>
25 – 33	7	29	+2	14	4	28
34 – 42	8	38	+1	8	1	8
<b>43 – 51</b>	<b>8</b>	<b>47</b>	0	0	0	0
52 – 60	4	56	-1	-4	1	4
61 – 69	1	65	-2	-2	4	4
70 – 78	1	74	-3	-3	9	9
79 – 87	1	83	-4	-4	16	16
<i>i</i> = 9	30	-	-	9	-	69

$$\begin{aligned}
 Mx &= M^1 + i \frac{\sum fx^1}{N} \\
 &= 47 + 9 \left( \frac{9}{30} \right) \\
 &= 47 + 9 (0.3) \\
 &= 47 + 2.7 \\
 &= 49.7
 \end{aligned}$$

$$\begin{aligned}
 SD_t &= i \sqrt{\frac{\sum fx^2}{n} - \left( \frac{\sum fx^1}{n} \right)^2} \\
 &= 9 \sqrt{\frac{69}{30} - \left( \frac{9}{30} \right)^2} \\
 &= 9 \sqrt{2.3 - (0.3)^2}
 \end{aligned}$$

$$\begin{aligned}
&= 9\sqrt{2.3 - 0.09} \\
&= 9\sqrt{2.21} \\
&= 9 \times 1.48 \\
&= 13.32
\end{aligned}$$

Table of Normality Data Test with Chi Kuadrat Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(f_0-f_h)}{f_h}$
79– 87	87.5	2.83	0.4977				
70 - 78	78.5	2.16	0.4846	0.01	0.3	1	2.33
61 - 69	69.5	1.48	0.4306	0.05	1.5	1	-0.33
52 - 60	60.5	0.81	0.2910	0.13	3.9	1	-0.74
43 – 51	51.5	0.13	0.0517	0.23	6.9	4	-0.42
34 - 42	42.5	-0.54	0.29460	-0.24	-7.2	8	-2.11
25 –33	33.5	-1.26	0.11314	0.18	5.4	8	0.48
	24.5	-1.89	-0.02938	-0.08	2.4	7	1.91
						$X^2$	1.12

Based on the table above, the reseracher found that  $x^2_{count} = 1.12$  while  $x^2_{table} = 12.592$  cause  $x^2_{count} < x^2_{table}$  ( $1.12 < 12.592$ ) with degree of freedom (dk) =  $7-1 = 6$  and significant level  $\alpha = 5\%$ . So distribution of VIII-2 class (pre-test) is normal.

## 6. Median

No	Interval	F	Fk
1	25 – 33	7	7
2	34 – 42	8	15
3	<b>43 – 51</b>	<b>8</b>	23
4	52 – 60	4	27
5	61 – 69	1	28
6	70 – 78	1	29
7	79 – 87	1	30

Position of Me in the interval of classes is number 4, that:

$$Bb = 42.5$$

$$F = 8$$

$$fm = 8$$

$$i = 9$$

$$n = 30$$

$$1/2n = 15$$

So :

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

$$= 42.5 + 9 \left( \frac{15 - 8}{8} \right)$$

$$= 42.5 + 9 (0.8)$$

$$= 42.5 + 7.2$$

$$= 49.7$$

## 7. Modus

No	Interval	f	Fk
1	25 – 33	7	7
2	34 – 42	8	15
3	<b>43 – 51</b>	8	23
4	52 – 60	<b>4</b>	27
5	61 – 69	1	28
6	70 – 78	1	29
7	79 – 87	1	30

$$M_o = L + \frac{d_1}{d_1 + d_2} i$$

$$L = 42.5$$

$$d_1 = 0$$

$$d_2 = 4$$

$$i = 9$$

So,

$$M_o = 42.5 + \frac{0}{0+4} 9$$

$$= 42.5 + 0. (9)$$

$$= 42.5 + 0$$

$$= 42.5$$

### RESULT OF NORMALITY TEST IN PRE TEST

#### RESULT OF THE NORMALITY TEST OF VIII-3 IN PRE-TEST

- The score of VIII-4 class in pre test from low score to high score:

20	20	25	25	25	30	35	40	40	40
45	45	45	50	50	55	55	55	60	60
65	70	75	75						

- High = 75

$$\text{Low} = 20$$

$$\text{Range} = \text{High} - \text{Low}$$

$$= 75 - 20$$

$$= 55$$

3. Total of Classes =  $1 + 3,3 \log (n)$

$$= 1 + 3,3 \log (24)$$

$$= 1 + 3,3 (1.38)$$

$$= 1 + 4.55$$

$$= 5.55$$

$$= 6$$

4. Length of Classes =  $\frac{\text{range}}{\text{total of class}} = \frac{55}{6} = 9.1 = 9$

5. Mean

Interval Class	F	X	x	fx	x <sup>2</sup>	fx <sup>2</sup>
20 – 28	5	24	+3	15	9	45
29 – 37	2	33	+2	4	4	8
38 – 46	6	42	+1	6	1	6
47 – 55	5	51	0	0	0	0
56 – 64	2	<b>60</b>	-1	-2	1	2
65 – 73	2	69	-2	-3	4	8
74 – 82	2	78	-3	-6	9	18
<i>i</i> = 9	24	-	-	14	-	87

$$Mx = M^1 + i \frac{\sum fx^1}{N}$$

$$= 51 + 9 \left( \frac{14}{24} \right)$$

$$= 51 + 9 (0.58)$$

$$= 51 + 5.22$$

$$= 56.22$$

$$SD_t = i \sqrt{\frac{\sum fx^2}{n} - \left( \frac{\sum fx^1}{n} \right)^2}$$

$$= 9 \sqrt{\frac{87}{24} - \left( \frac{14}{24} \right)^2}$$

$$= 9 \sqrt{3.625 - (0.58)^2}$$

$$\begin{aligned}
&= 9\sqrt{3.625 - 0.336} \\
&= 9\sqrt{3.289} \\
&= 9 \times 1.81 \\
&= 16.32
\end{aligned}$$

Table of Normality Data Test with Chi Kuadrat Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(f_0-f_h)}{f_h}$	
74 – 82	82.5	1.61	0.4463					
65 – 73	73.5	1.05	0.3531	0.093	2.23	2	-0.10	
56– 64	64.5	0.50	0.1915	0.161	3.86	2	-0.48	
47 – 55	55.5	-0.72	0.23576	-0.044	-1.05	2	-2.90	
38 – 46	46.5	-0.59	0.27760	-0.041	-0.98	5	-6.10	
29 – 37	37.5	-1.14	0.12714	0.150	3.6	6	0.66	
20 – 28	28.5	-1.69	0.04551	0.081	1.94	2	0.03	
	19.5	-2.25	-0.01222	0.033	0.79	5	5.32	
$X^2$								3.57

Based on the table above, the reseracher found that  $x^2_{count} = 3.57$  while  $x^2_{table} = 12,592$  cause  $x^2_{count} > x^2_{table}$  ( $3.57 > 12.592$ ) with degree of freedom (dk) =  $7-1 = 6$  and significant level  $\alpha = 5\%$ . So distribution of VIII-3 class (pre-test) is not normal.

6. Median

No	Interval	F	Fk
1	20 – 28	5	5
2	29 – 37	2	7
3	38 – 46	6	13
4	<b>47 – 55</b>	<b>5</b>	18
5	56 – 64	2	20
6	65 – 73	2	22
7	74 – 82	2	24

Position of Me in the interval of classes is number 5, that:

$$Bb = 46.5$$

$$F = 6$$

$$fm = 5$$

$$i = 9$$

$$n = 24$$

$$1/2n = 12$$

So :

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

$$= 46.5 + 9 \left( \frac{12 - 6}{5} \right)$$

$$= 46.5 + 9 (1.2)$$

$$= 46.5 + 10.8$$

$$= 57.3$$



## 7. Modus

No	Interval	F	Fk
1	20 – 28	5	3
2	29 – 37	2	4
3	38 – 46	6	12
4	<b>47 – 55</b>	<b>5</b>	14
5	56 – 64	2	25
6	65 – 73	2	27
7	74 – 82	2	30

$$M_o = L + \frac{d_1}{d_1 + d_2} i$$

$$L = 46.5$$

$$d_1 = -1$$

$$d_2 = 3$$

$$i = 9$$

So,

$$\begin{aligned} M_o &= 46.5 + \frac{-1}{-1+3} 9 \\ &= 46.5 + -0.5 (9) \\ &= 46.5 + (-4.5) \\ &= 42 \end{aligned}$$

## Appendix 21

### RESULT OF NORMALITY TEST IN POST TEST

#### RESULT OF THE NORMALITY TEST OF VIII-1 IN POST-TEST

8. The score of VIII-2 class in post test from low score to high score:

50	50	55	60	60	65	70	70	70	75
75	80	80	80	80	80	80	80	80	80
80	80	80	85	85	90	90	90	90	90

9. High = 90

Low = 50

Range = High – Low

= 90 - 50

= 40

10. Total of Classes =  $1 + 3,3 \log (n)$

=  $1 + 3,3 \log (30)$

=  $1 + 3,3 (1.47)$

=  $1 + 4.85$

= 5.85

= 6

11. Length of Classes =  $\frac{\text{range}}{\text{totalofclass}} = \frac{40}{6} = 6.6 = 7$

12. Mean

Interval Class	F	X	x	fx	x <sup>2</sup>	fx <sup>2</sup>
50 – 56	3	53	+4	12	16	48
57 – 63	2	60	+3	6	9	18
64 – 70	4	67	+2	8	4	16
71 – 77	2	74	+1	2	1	2
78 – 84	12	<b>81</b>	0	0	0	0
85 – 91	7	88	-1	-7	1	7
<i>i</i> = 7	30	-	-	21	-	91

$$\begin{aligned}M_x &= M^1 + i \frac{\sum fx^1}{N} \\&= 81 + 7 \left(\frac{21}{30}\right) \\&= 81 + 7 (0.7) \\&= 81 + 4.9 \\&= 85.9\end{aligned}$$

$$\begin{aligned}SD_t &= i \sqrt{\frac{\sum fx^2}{n} - \left(\frac{\sum fx^1}{n}\right)^2} \\&= 7 \sqrt{\frac{91}{30} - \left(\frac{21}{30}\right)^2} \\&= 7 \sqrt{3.03 - (0.7)^2} \\&= 7 \sqrt{3.03 - 0.49} \\&= 7 \sqrt{2.54} \\&= 7 \times 1.59 \\&= 11.13\end{aligned}$$

Table of Normality Data Test with Chi Kuadrat Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(f_0-f_h)}{f_h}$
85 – 91	91.5	0.50	0.1915	0.06	1.8	7	2.88
78 – 89	89.9	0.32	0.1255	-0.10	-3	12	-5
71 – 77	77.5	-0.75	0.22663	0.14	4.2	2	-0.52
64 – 70	70.5	-1.78	0.08379	0.06	1.8	4	1.22
57 – 63	63.5	-2.01	0.02222	0.01	0.3	2	5.66
50 – 56	56.5	-2.64	0.00415	0.00	0	3	0
	49.5	-3.27	0.00054				
$X^2$							4.24

Based on the table above, the reseracher found that  $x^2_{count} = 4.24$  while  $x^2_{table} = 11.070$  cause  $x^2_{count} < x^2_{table}$  ( $4.24 < 11.070$ ) with degree of freedom (dk) =  $6-1 = 5$  and significant level  $\alpha = 5\%$ . So distribution of VIII-1 class (post-test) is normal.

### 13. Median

No	Interval	F	Fk
1	50 – 56	3	3
2	57 – 63	2	5
3	64 – 70	4	9
4	71 – 77	2	11
5	<b>78 – 84</b>	<b>12</b>	23
6	85 – 91	7	30

Position of Me in the interval of classes is number 4, that:

$$Bb = 77.5$$

$$F = 11$$

$$fm = 12$$

$$i = 7$$

$$n = 30$$

$$1/2n = 15$$

So :

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

$$= 77.5 + 7 \left( \frac{15 - 11}{12} \right)$$

$$= 77.5 + 7 (0.33)$$

$$= 77.5 + 2.31$$

$$= 79.81$$

#### 14. Modus

No	Interval	F	Fk
1	50 – 56	3	3
2	57 – 63	2	5
3	64 – 70	4	9
4	71 – 77	2	11
5	<b>78 – 84</b>	<b>12</b>	23
6	85 – 91	7	30

$$M_o = L + \frac{d_1}{d_1 + d_2} i$$

$$L = 77.5$$

$$d_1 = 10$$

$$d_2 = 5$$

$$i = 7$$

So,

$$\begin{aligned}
M_o &= 77.5 + \frac{10}{10+5} 7 \\
&= 77.5 + 0.66 (7) \\
&= 77.5 + 4.62 \\
&= 82.16
\end{aligned}$$

### RESULT OF NORMALITY TEST IN POST TEST

#### RESULT OF THE NORMALITY TEST OF VIII-2 IN POST-TEST

1. The score of VIII-2 class in post test from low score to high score:

30	30	35	35	40	40	40	40	45	45
45	50	50	50	55	55	55	55	60	60
60	60	65	70	70	70	75	75	80	80

2. High = 80

Low = 30

Range = High – Low

$$= 80 - 30$$

$$= 50$$

3. Total of Classes =  $1 + 3,3 \log (n)$

$$= 1 + 3,3 \log (30)$$

$$= 1 + 3,3 (1.47)$$

$$= 1 + 4.85$$

$$= 5.85$$

$$= 6$$

4. Length of Classes =  $\frac{range}{totalofclass} = \frac{50}{6} = 8.3 = 8$

## 5. Mean

Interval Class	F	X	x'	fx'	x' <sup>2</sup>	fx' <sup>2</sup>
30 – 37	4	33.5	+3	12	9	36
38 – 45	7	41.5	+2	14	4	28
46 – 53	3	49.5	+1	3	1	3
54 – 61	8	<b>57.5</b>	0	0	0	0
62 – 69	1	65.5	-1	-1	1	1
70 – 77	5	73.5	-2	-10	4	20
78 – 85	2	81.5	-3	-6	9	18
<i>i</i> = 8	30	-	-	14	-	106

$$M_x = M^1 + i \frac{\sum fx^1}{N}$$

$$= 57.5 + 8 \left( \frac{14}{30} \right)$$

$$= 57.5 + 8 (0.46)$$

$$= 57.5 + 3.68$$

$$= 61.18$$

$$SD_t = i \sqrt{\frac{\sum fx^2}{n} - \left( \frac{\sum fx^1}{n} \right)^2}$$

$$= 8 \sqrt{\frac{106}{30} - \left( \frac{8}{30} \right)^2}$$

$$= 8 \sqrt{3.53 - (0.26)^2}$$

$$= 8 \sqrt{3.53 - 0.067}$$

$$= 8 \sqrt{3.46}$$

$$= 8 \times 1.86 = 14.88$$

Table of Normality Data Test with Chi Kuadrat Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	$f_h$	$f_0$	$\frac{(f_0-f_h)}{f_h}$
78 – 85	85.5	1.63	0.4484	0.08	2.4	2	-0.16
	77.5	1.09	0.3621				
70 – 77	69.5	0.55	0.2088	0.15	4.5	5	0.11
62 – 69	61.5	0.02	0.0080	0.20	6	1	-0.83
54 – 61	53.5	-0.51	0.30503	-0.29	-8.7	8	-0.91
	46 – 53	45.5	-1.05				
38 – 45	37.5	-1.89	0.05592	0.09	2.7	7	1.59
30 – 37	29.5	-3.22	0.00064	0.05	1.5	4	1.66
$X^2$							0.13

Based on the table above, the reseracher found that  $x^2_{count} = 0.13$  while  $x^2_{table} = 12.592$  cause  $x^2_{count} < x^2_{table}$  ( $0.13 < 12.592$ ) with degree of freedom (dk) =  $7-1 = 6$  and significant level  $\alpha = 5\%$ . So distribution of VIII-2 class (post-test) is normal.

#### 6. Median

No	Interval	F	Fk
1	30 – 37	4	4
2	38 – 45	7	11
3	46 – 53	3	14
4	<b>54 – 61</b>	<b>8</b>	22
5	62 – 69	1	23
6	70 – 77	5	28
7	78 – 85	2	30

Position of Me in the interval of classes is number 4, that:



$$Bb = 53.5$$

$$F = 14$$

$$fm = 8$$

$$i = 8$$

$$n = 30$$

$$1/2n = 15$$

So :

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

$$= 53.5 + 8 \left( \frac{15 - 14}{8} \right)$$

$$= 53.5 + 8 (0.125)$$

$$= 53.5 + 1$$

$$= 54.5$$

## 7. Modus

No	Interval	F	Fk
1	30 – 37	4	4
2	38 – 45	7	11
3	46 – 53	3	14
4	<b>54 – 61</b>	<b>8</b>	22
5	62 – 69	1	23
6	70 – 77	5	28
7	78 – 85	2	30

$$M_o = i \sqrt{\frac{\sum fx_i^2}{n} - \left( \frac{\sum fx_i}{n} \right)^2}$$

$$L = 53.5$$

$$d_1 = 5$$

$$d_2 = 7$$

$$i = 8$$

So,

$$\begin{aligned}M_0 &= 53.5 + \frac{5}{5+7} 8 \\ &= 53.5 + 0.41 (8) \\ &= 53.5 + 3.28 = 56.78\end{aligned}$$

## Appendix 22

### 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:

$$Tt = \frac{M_1 - M_2}{\sqrt{\left(\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

$$Tt = \frac{62.10 - 59.17}{\sqrt{\left(\frac{(31 - 1)126.61 + (30 - 1)94.88}{31 + 30 - 2}\right)\left(\frac{1}{31} + \frac{1}{30}\right)}}$$

$$Tt = \frac{2.93}{\sqrt{\left(\frac{30(126.61) + 29(94.88)}{59}\right)(0.032 + 0.033)}}$$

$$Tt = \frac{2.93}{\sqrt{\left(\frac{3798.3 + 2751.52}{59}\right)(0.032 + 0.033)}}$$

$$Tt = \frac{2.93}{\sqrt{(111.01)(0.065)}}$$

$$Tt = \frac{2.93}{\sqrt{7.22}}$$

$$Tt = \frac{2.93}{2.69}$$

$$Tt = 1.09$$

Based on researcher calculation result of homogeneity test of the both averages, researcher found that  $t_{\text{count}} = 1.09$  with opportunity  $(1 - \alpha) = 1 - 5\% = 95\%$  and  $dk = n_1 + n_2 - 2 = 31 + 30 - 2 = 59$ ,  $t_{\text{table}} = 1.671$ . So,  $t_{\text{count}} < t_{\text{table}}$  ( $1.09 < 1.671$ ) 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 23

### 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:

$$Tt = \frac{M_1 - M_2}{\sqrt{\left(\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}\right)\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

$$Tt = \frac{83.55 - 79.67}{\sqrt{\left(\frac{(31 - 1)63.65 + (30 - 1)53.33}{31 + 30 - 2}\right)\left(\frac{1}{31} + \frac{1}{30}\right)}}$$

$$Tt = \frac{3.88}{\sqrt{\left(\frac{30(63.65) + 29(53.33)}{59}\right)(0.032 + 0.033)}}$$

$$Tt = \frac{3.88}{\sqrt{\left(\frac{1909.5 + 1546.57}{59}\right)(0.032 + 0.033)}}$$

$$Tt = \frac{3.88}{\sqrt{(26.21)(0.065)}}$$

$$Tt = \frac{3.88}{\sqrt{1.704}}$$

$$Tt = \frac{3.88}{1.31}$$

$$Tt = 2.961$$

Based on researcher calculation result of homogeneity test of the both averages, researcher found that  $t_{\text{count}} = 2.961$  with opportunity  $(1 - \alpha) = 1 - 5\% = 95\%$

and  $dk = n_1 + n_2 - 2 = 31 + 30 - 2 = 59$ ,  $t_{table} = 1.671$ . So,  $t_{count} > t_{table} (2.961 > 1.671)$  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 24

### 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

<b>30</b>	29,336	33,530	36,250	40,256	43,773	50,892
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**APPENDIX 25**

**Z-Table**

<b>Z</b>	<b>0.00</b>	<b>0.01</b>	<b>0.02</b>	<b>0.03</b>	<b>0.04</b>	<b>0.05</b>	<b>0.06</b>	<b>0.07</b>	<b>0.08</b>	<b>0.09</b>
-3.9	0.00005	0.00005	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00003	0.00003
-3.8	0.00007	0.00007	0.00007	0.00006	0.00006	0.00006	0.00006	0.00005	0.00005	0.00005
-3.7	0.00011	0.00010	0.00010	0.00010	0.00009	0.00009	0.00008	0.00008	0.00008	0.00008
-3.6	0.00016	0.00015	0.00015	0.00014	0.00014	0.00013	0.00013	0.00012	0.00012	0.00011
-3.5	0.00023	0.00022	0.00022	0.00021	0.00020	0.00019	0.00019	0.00018	0.00017	0.00017
-3.4	0.00034	0.00032	0.00031	0.00030	0.00029	0.00028	0.00027	0.00026	0.00025	0.00024
-3.3	0.00048	0.00047	0.00045	0.00043	0.00042	0.00040	0.00039	0.00038	0.00036	0.00035
-3.2	0.00069	0.00066	0.00064	0.00062	0.00060	0.00058	0.00056	0.00054	0.00052	0.00050
-3.1	0.00097	0.00094	0.00090	0.00087	0.00084	0.00082	0.00079	0.00076	0.00074	0.00071
-3.0	0.00135	0.00131	0.00126	0.00122	0.00118	0.00114	0.00111	0.00107	0.00104	0.00100
-2.9	0.00187	0.00181	0.00175	0.00169	0.00164	0.00159	0.00154	0.00149	0.00144	0.00139
-2.8	0.00256	0.00248	0.00240	0.00233	0.00226	0.00219	0.00212	0.00205	0.00199	0.00193
-2.7	0.00347	0.00336	0.00326	0.00317	0.00307	0.00298	0.00289	0.00280	0.00272	0.00264
-2.6	0.00466	0.00453	0.00440	0.00427	0.00415	0.00402	0.00391	0.00379	0.03680	0.00357
-2.5	0.00621	0.00604	0.00587	0.00570	0.00554	0.00539	0.00523	0.00508	0.00494	0.00480
-2.4	0.00820	0.00798	0.00776	0.00755	0.00734	0.00714	0.00695	0.00676	0.00657	0.00639
-2.3	0.01072	0.01044	0.01017	0.00990	0.00964	0.00939	0.00914	0.00889	0.00866	0.00842
-2.2	0.01390	0.01355	0.01321	0.01287	0.01255	0.01222	0.01191	0.01160	0.01130	0.01101
-2.1	0.01786	0.01743	0.01700	0.01659	0.01618	0.01578	0.01539	0.01500	0.01463	0.01426
-2.0	0.02275	0.02222	0.02169	0.02118	0.02068	0.02018	0.01970	0.01923	0.01876	0.01831
-1.9	0.02872	0.02807	0.02743	0.02680	0.02619	0.02559	0.02500	0.02442	0.02385	0.02330
-1.8	0.03593	0.03515	0.03438	0.03362	0.03288	0.03216	0.03144	0.03074	0.03005	0.02938

<b>-1.7</b>	0.04457	0.04363	0.04272	0.04182	0.04093	0.04006	0.03920	0.03836	0.03754	0.03673
<b>-1.6</b>	0.05480	0.05370	0.05262	0.05155	0.05050	0.04947	0.04846	0.04746	0.04648	0.04551
<b>-1.5</b>	0.06681	0.06552	0.06426	0.06301	0.06178	0.06057	0.05938	0.05821	0.05705	0.05592
<b>-1.4</b>	0.08076	0.07927	0.07780	0.07636	0.07493	0.07353	0.07215	0.07078	0.06944	0.06811
<b>-1.3</b>	0.09680	0.09510	0.09342	0.09176	0.09012	0.08851	0.08691	0.08534	0.08379	0.08226
<b>-1.2</b>	0.11507	0.11314	0.11123	0.10935	0.10749	0.10565	0.10383	0.10204	0.10027	0.09853
<b>-1.1</b>	0.13567	0.13350	0.13136	0.12924	0.12714	0.12507	0.12302	0.12100	0.11900	0.11702
<b>-1.0</b>	0.15866	0.15625	0.15386	0.15151	0.14917	0.14686	0.14457	0.14231	0.14007	0.13786
<b>-0.9</b>	0.18406	0.18141	0.17879	0.17619	0.17361	0.17106	0.16853	0.16602	0.16354	0.16109
<b>-0.8</b>	0.21186	0.20897	0.20611	0.20327	0.20045	0.19766	0.19489	0.19215	0.18943	0.18673
<b>-0.7</b>	0.24196	0.23885	0.23576	0.23270	0.22965	0.22663	0.22363	0.22065	0.21770	0.21476
<b>-0.6</b>	0.27425	0.27093	0.26763	0.26435	0.26109	0.25785	0.25463	0.25143	0.24825	0.24510
<b>-0.5</b>	0.30854	0.30503	0.30153	0.29806	0.29460	0.29116	0.28774	0.28434	0.28096	0.27760
<b>-0.4</b>	0.34458	0.34090	0.33724	0.33360	0.32997	0.32636	0.32276	0.31918	0.31561	0.31207
<b>-0.3</b>	0.38209	0.37828	0.37448	0.37070	0.36693	0.36317	0.35942	0.35569	0.35197	0.34827
<b>-0.2</b>	0.42074	0.41683	0.41294	0.40905	0.40517	0.40129	0.39743	0.39358	0.38974	0.38591
<b>-0.1</b>	0.46017	0.45620	0.45224	0.44828	0.44433	0.44038	0.43644	0.43251	0.42858	0.42465
<b>-0.0</b>	0.50000	0.49601	0.49202	0.48803	0.48405	0.48006	0.47608	0.47210	0.46812	0.46414

**Z-Table**

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





**APPENDIX 26**

**Percentage Points of the t Distribution**

<b>Pr df</b>	<b>0.25</b>	<b>0.10</b>	<b>0.05</b>	<b>0.025</b>	<b>0.01</b>	<b>0.005</b>	<b>0.001</b>
	<b>0.50</b>	<b>0.20</b>	<b>0.10</b>	<b>0.050</b>	<b>0.02</b>	<b>0.010</b>	<b>0.002</b>
<b>1</b>	1.00000	3.07768	6.31375	12.70620	31.82052	63.65674	318.30884
<b>2</b>	0.81650	1.88562	2.91999	4.30265	6.96456	9.92484	22.32712
<b>3</b>	0.76489	1.63774	2.35336	3.18245	4.54070	5.84091	10.21453
<b>4</b>	0.74070	1.53321	2.13185	2.77645	3.74695	4.60409	7.17318
<b>5</b>	0.72669	1.47588	2.01505	2.57058	3.36493	4.03214	5.89343
<b>6</b>	0.71756	1.43976	1.94318	2.44691	3.14267	3.70743	5.20763
<b>7</b>	0.71114	1.41492	1.89458	2.36462	2.99795	3.49948	4.78529
<b>8</b>	0.70639	1.39682	1.85955	2.30600	2.89646	3.35539	4.50079
<b>9</b>	0.70272	1.38303	1.83311	2.26216	2.82144	3.24984	4.29681
<b>10</b>	0.69981	1.37218	1.81246	2.22814	2.76377	3.16927	4.14370
<b>11</b>	0.69745	1.36343	1.79588	2.20099	2.71808	3.10581	4.02470
<b>12</b>	0.69548	1.35622	1.78229	2.17881	2.68100	3.05454	3.92963
<b>13</b>	0.69383	1.35017	1.77093	2.16037	2.65031	3.01228	3.85198
<b>14</b>	0.69242	1.34503	1.76131	2.14479	2.62449	2.97684	3.78739
<b>15</b>	0.69120	1.34061	1.75305	2.13145	2.60248	2.94671	3.73283
<b>16</b>	0.69013	1.33676	1.74588	2.11991	2.58349	2.92078	3.68615
<b>17</b>	0.68920	1.33338	1.73961	2.10982	2.56693	2.89823	3.64577
<b>18</b>	0.68836	1.33039	1.73406	2.10092	2.55238	2.87844	3.61048
<b>19</b>	0.68762	1.32773	1.72913	2.09302	2.53948	2.86093	3.57940
<b>20</b>	0.68695	1.32534	1.72472	2.08596	2.52798	2.84534	3.55181
<b>21</b>	0.68635	1.32319	1.72074	2.07961	2.51765	2.83136	3.52715
<b>22</b>	0.68581	1.32124	1.71714	2.07387	2.50832	2.81876	3.50499
<b>23</b>	0.68531	1.31946	1.71387	2.06866	2.49987	2.80734	3.48496
<b>24</b>	0.68485	1.31784	1.71088	2.06390	2.49216	2.79694	3.46678
<b>25</b>	0.68443	1.31635	1.70814	2.05954	2.48511	2.78744	3.45019
<b>26</b>	0.68404	1.31497	1.70562	2.05553	2.47863	2.77871	3.43500
<b>27</b>	0.68368	1.31370	1.70329	2.05183	2.47266	2.77068	3.42103
<b>28</b>	0.68335	1.31253	1.70113	2.04841	2.46714	2.76326	3.40816
<b>29</b>	0.68304	1.31143	1.69913	2.04523	2.46202	2.75639	3.39624
<b>30</b>	0.68276	1.31042	1.69726	2.04227	2.45726	2.75000	3.38518
<b>31</b>	0.68249	1.30946	1.69552	2.03951	2.45282	2.74404	3.37490
<b>32</b>	0.68223	1.30857	1.69389	2.03693	2.44868	2.73848	3.36531

<b>33</b>	0.68200	1.30774	1.69236	2.03452	2.44479	2.73328	3.35634
<b>34</b>	0.68177	1.30695	1.69092	2.03224	2.44115	2.72839	3.34793
<b>35</b>	0.68156	1.30621	1.68957	2.03011	2.43772	2.72381	3.34005
<b>36</b>	0.68137	1.30551	1.68830	2.02809	2.43449	2.71948	3.33262
<b>37</b>	0.68118	1.30485	1.68709	2.02619	2.43145	2.71541	3.32563
<b>38</b>	0.68100	1.30423	1.68595	2.02439	2.42857	2.71156	3.31903
<b>39</b>	0.68083	1.30364	1.68488	2.02269	2.42584	2.70791	3.31279
<b>40</b>	0.68067	1.30308	1.68385	2.02108	2.42326	2.70446	3.30688

**Percentage Points of the t Distribution**

<b>Pr df</b>	<b>0.25</b>	<b>0.10</b>	<b>0.05</b>	<b>0.025</b>	<b>0.01</b>	<b>0.005</b>	<b>0.001</b>
	<b>0.50</b>	<b>0.20</b>	<b>0.10</b>	<b>0.050</b>	<b>0.02</b>	<b>0.010</b>	<b>0.002</b>
<b>41</b>	0.68052	1.30254	1.68288	2.01954	2.42080	2.70118	3.30127
<b>42</b>	0.68038	1.30204	1.68195	2.01808	2.41847	2.69807	3.29595
<b>43</b>	0.68024	1.30155	1.68107	2.01669	2.41625	2.69510	3.29089
<b>44</b>	0.68011	1.30109	1.68023	2.01537	2.41413	2.69228	3.28607
<b>45</b>	0.67998	1.30065	1.67943	2.01410	2.41212	2.68959	3.28148
<b>46</b>	0.67986	1.30023	1.67866	2.01290	2.41019	2.68701	3.27710
<b>47</b>	0.67975	1.29982	1.67793	2.01174	2.40835	2.68456	3.27291
<b>48</b>	0.67964	1.29944	1.67722	2.01063	2.40658	2.68220	3.26891
<b>49</b>	0.67953	1.29907	1.67655	2.00958	2.40489	2.67995	3.26508
<b>50</b>	0.67943	1.29871	1.67591	2.00856	2.40327	2.67779	3.26141
<b>51</b>	0.67933	1.29837	1.67528	2.00758	2.40172	2.67572	3.25789
<b>52</b>	0.67924	1.29805	1.67469	2.00665	2.40022	2.67373	3.25451
<b>53</b>	0.67915	1.29773	1.67412	2.00575	2.39879	2.67182	3.25127
<b>54</b>	0.67906	1.29743	1.67356	2.00488	2.39741	2.66998	3.24815
<b>55</b>	0.67898	1.29713	1.67303	2.00404	2.39608	2.66822	3.24515
<b>56</b>	0.67890	1.29685	1.67252	2.00324	2.39480	2.66651	3.24226
<b>57</b>	0.67882	1.29658	1.67203	2.00247	2.39357	2.66487	3.23948
<b>58</b>	0.67874	1.29632	1.67155	2.00172	2.39238	2.66329	3.23680
<b>59</b>	0.67867	1.29607	1.67109	2.00100	2.39123	2.66176	3.23421
<b>60</b>	0.67860	1.29582	1.67065	2.00030	2.39012	2.66028	3.23171
<b>61</b>	0.67853	1.29558	1.67022	1.99962	2.38905	2.65886	3.22930
<b>62</b>	0.67847	1.29536	1.66980	1.99897	2.38801	2.65748	3.22696
<b>63</b>	0.67840	1.29513	1.66940	1.99834	2.38701	2.65615	3.22471
<b>64</b>	0.67834	1.29492	1.66901	1.99773	2.38604	2.65485	3.22253
<b>65</b>	0.67828	1.29471	1.66864	1.99714	2.38510	2.65360	3.22041
<b>66</b>	0.67823	1.29451	1.66827	1.99656	2.38419	2.65239	3.21837
<b>67</b>	0.67817	1.29432	1.66792	1.99601	2.38330	2.65122	3.21639
<b>68</b>	0.67811	1.29413	1.66757	1.99547	2.38245	2.65008	3.21446
<b>69</b>	0.67806	1.29394	1.66724	1.99495	2.38161	2.64898	3.21260
<b>70</b>	0.67801	1.29376	1.66691	1.99444	2.38081	2.64790	3.21079

<b>71</b>	0.67796	1.29359	1.66660	1.99394	2.38002	2.64686	3.20903
<b>72</b>	0.67791	1.29342	1.66629	1.99346	2.37926	2.64585	3.20733
<b>73</b>	0.67787	1.29326	1.66600	1.99300	2.37852	2.64487	3.20567
<b>74</b>	0.67782	1.29310	1.66571	1.99254	2.37780	2.64391	3.20406
<b>75</b>	0.67778	1.29294	1.66543	1.99210	2.37710	2.64298	3.20249
<b>76</b>	0.67773	1.29279	1.66515	1.99167	2.37642	2.64208	3.20096
<b>77</b>	0.67769	1.29264	1.66488	1.99125	2.37576	2.64120	3.19948
<b>78</b>	0.67765	1.29250	1.66462	1.99085	2.37511	2.64034	3.19804
<b>79</b>	0.67761	1.29236	1.66437	1.99045	2.37448	2.63950	3.19663
<b>80</b>	0.67757	1.29222	1.66412	1.99006	2.37387	2.63869	3.19526
$\infty$							

**Appendix 27**

**PHOTO RESEARCH**











