THE EFFECT OF P2R (PREVIEW, READ, REVIEW) STRATEGY ON STUDENTS' READING COMPREHENSION AT GRADE VIII MTs NEGERI 2 PADANGSIDIMPUAN

A THESIS

Submitted to the State Institute for Islamic Studies Padangsidimpuan as a Partial Fulfillment of the Requirements for the Degree of Islamic Educational Scholar (S.Pd.I) in English

Written By:

ERMINA SERIWATY NAINGGOLAN
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ENGLISH EDUCATION DEPARTMENT

FACULTY OF TARBIYAH AND PEDAGOGY
STATE INSTITUTE FOR ISLAMIC STUDIES
PADANGSIDIMPUAN
2014

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Written By:

ERMINA SERIWATY NAINGGOLAN
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Written By:

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ENGLISH EDUCATION DEPARTMENT

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THE STATE INSTITUTE FOR ISLAMIC STUDIES PADANGSIDIMPUAN
2014

Term   : Thesis
                 a.n. Ermina Seriwaty Nainggolan

Appendix : 7 (Seven Exemplars)

Assalamu'alaikumWr. Wb.

Padangsidimpuan, 27th August 2014

To :
Dean Tarbiyah and Pedagogy Faculty
in –
Padangsidimpuan

After reading, studying and giving advice for necessary revise on thesis belongs to ERMINA SERIWATY NAINGGOLAN, entitle *"The Effect of P2R (Preview, Read, Review) Strategy on Students' Reading Comprehension at Grade VIII 2013/2014 MTs Negeri 2 Padangsidimpuan"*, we assume that the thesis has been acceptable to complete the assignment and fulfill for the degree of Islamic Educational Scholar (S.Pd.I) in English, Tarbiyah and Pedagogy Faculty in IAIN Padangsidimpuan.

Therefore, we hoped she could be defined her thesis in Munaqosyah. That is all and thank you for the selection.
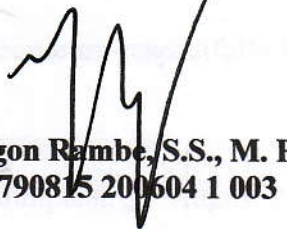
Wassalamu'alaikum Wr. Wb.

Advisor I	**Advisor II**
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DECLARATION OF SELF THESIS COMPLETION

I myself:

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Had written this thesis with consultative aids of advisors, without doing and dividing plagiarism and others' un-registered advice based on students' code case 14 verses 2.

This statement is accomplished fully responsibility. The researcher will receive every chastisement if there is inaccurate on this statement as sentenced in students' code case 19 verses 4 including taking off the academic degree un-respectfully based on the official authorized norms.

Padangsidimpuan, 30 August 2014

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SCHOLAR MUNAQOSYAH EXAMINATION

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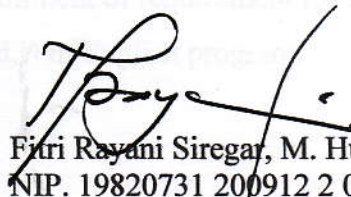
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Time   : 09:00-12:00
Result/Mark : 80.87 (A)
IPK   : 3.63
Predicate   : Cumlaude

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PADANGSIDIMPUAN
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LEGALIZATION

Thesis   : **THE EFFECT OF P2R (PREVIEW, READ, REVIEW) STRATEGY ON STUDENTS' READING COMPREHENSION AT GRADE VIII MTs NEGERI 2 PADANGSIDIMPUAN**

Written By   : ERMINA SERIWATY NAINGGOLAN

Reg. Number : 10 340 0003

The Thesis had been accepted as a partial fulfillment of requirement for degree of
Islamic educational scholar (S.Pd.I) in English program.

Padangsidimpuan, 18 September 2014

Dean

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ACKNOWLEDGEMENT

بِسْمِ اللهِ الرَّحْمَنِ الرَّحِيمِ

First of all, I would like to say thank you to Allah the Almighty who has given me time and healthy in writing and finishing this thesis. Next, I do not forget to send Shalawat to our prophet Muhammad SAW who has brought us from the darkness into the lightness.

This thesis is presented to the English education Department of the State Instutute for Islamic Studies (IAIN) Padangsidimpuan as a partial fulfillment for degree Strata I (S1).

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

1. Mrs. Eka Sustri Harida, M.Pd. as the first advisor who has given suggestions and helps in writing this thesis.May God bless her.

2. Mr. Sojuangon Rambe, SS., M. Pd., as the second advisor who has helped, supported and suggested me to finish this thesis.

3. Mrs. Hj. Zulhimma, S.Ag., M.Pd., the Dean of Tarbiyah Faculty.

4. Mrs. Rayendriani Fahmei Lubis, M.Ag., the Leader of English Department.

5. All lecturers of IAIN Padangsidimpuan who have given the knowledge during my studying in this campus.

6. IAIN Padangsidimpuan Librarian (Yusri Fahmi, S. Ag., S. S., M. Hum) and the staffs for their cooperative and permission to use their books.

ii

7. My beloved parent, (Muslim Nainggolan and Nur Cahyani Harahap) who taught me how to be patient to face this life, my elder brother (Asmara Hamid Nainggolan), my aunts (Tiajun Nainggolan), (Haminah) and all my beloved family who always give their praying, motivation, and moral encouragement to finish my studying.

8. My beloved Teachers in MTs Negeri 2 Padangsidimpuan that are always support me.

9. My beloved friends who was patience and care to support me.

10. All my friends in IAIN Padangsidimpuan, good luck for you.

11. All the people who have helped me to finish my study that I can't mention one by one. May Allah, the Almighty bless them all, Amin.

Finally, I realize that there must be some weaknesses in this thesis. Therefore, I welcome to all good and value critics that can improve this thesis.

Padangsidimpuan, 27th August 2014

The Researcher,

ERMINA SERIWATY NAINGGOLAN
NIM. 10 340 0003

Name	:	**Ermina Seriwaty Nainggolan**
Register Number	:	**10 340 0003**
Faculty	:	**Tarbiyah and Pedagogy**
Department	:	**English Education (TBI-1)**
The Title of the Thesis	:	**The Effect of P2R (Preview, Read, Review) Strategy on Students' Reading Comprehension at Grade VIII MTs Negeri 2 Padangsidimpuan**

ABSTRACT

This research discussed about the effect of P2R (Preview, Read, Review) strategy on Students' Reading Comprehension at Grade VIII MTs N 2 Padangsidimpuan. The problems of this research were the students still got low grade with average 68; meanwhile the standard of English competency in this school was 80, students did not know the strategies, stress and tired in reading comprehension and students were lack of vocabulary and motivation in reading. The aims of this research were to describe and to examine the effect of P2R (Preview, Read, Review) strategy on Students' Reading Comprehension at Grade VIII MTs N 2 Padangsidimpuan.

This research employed experimental research. The population of this research was the eight grade of MTs Negeri 2 Padangsidimpuan. The total of population were 4 classes. Then, the sample of the research was 2 classes, experiment class (VIII-1) and control class (VIII-2). It was taken randomly after conducting normality and homogeneity test. To collect the data, researcher used test for measuring students' Reading Comprehension achievement. To analysis the data, the researcher used t-test.

Based on the result of the research, researcher showed the description of the data was found that the result of experimental class was higher than control class (81.35>77.65), and the score of t_{count} was bigger than t_{table} (4.11> 1.67). It means that the hypothesis alternative (H_a) was accepted. It was concluded that there was the significant effect of P2R (Preview, Read, Review) strategy on Students' Reading Comprehension at Grade VIII MTs N 2 Padangsidimpuan.

CURRICULUM VITAE

A. Identity

  Name   : ERMINA SERIWATY NAINGGOLAN

  Nim   : 10 340 0003

  Place and Birthday   : Gonting Julu, 17th October 1991

  Sex   : Female

  Religion   : Moslem

  Address   : Gonting Julu, Kec. Huristak, Padang Lawas

B. Parent

  1. Father's name   : Muslim Nainggolan

  2. Mother's name   : Nur Cahyani Harahap

C. Educational Background

  1. Graduated from Elementary School SD Negeri Desa Gonting Julu in 2003.

  2. Graduated from Islamic Boarding School MTs S Syekh Ahmad Daud in 2007.

  3. Graduated from Islamic Boarding School MAS Syekh Ahmad Daud in 2010.

  4. Be University student in IAIN Padangsidimpuan 2014.

Appendix 1

Experimental Class

RENCANA PELAKSANAAN PEMBELAJARAN
(RPP)

Nama Sekolah   : MTs Negeri 2 Padangsidimpuan

Mata Pelajaran   : Bahasa Inggris

Kelas/Semsester   : VIII^4 (Delapan)/II (genap)

Alokasi Waktu   : 4 x 40 menit (2 x Pertemuan)

Standar Kompetensi : Memahami makna dalam esei pendek sederhana berbentuk *recount* untuk berinteraksi dengan lingkungan sekitar.

Kompetensi dasar   : Membaca nyaring bermakna teks fungsional dan esei pendek sederhana berbentuk *recount* dengan menggunakan ragam bahasa tulis secara akurat, lancar dan berterima untuk berinteraksi dengan lingkungan sekitar.

Jenis teks   : Recount Text

Aspek/Skill   : Membaca

1. **Indikator**   :

   ➢ Membaca dan memahami teks *recount*

   ➢ Mengidentifikasi topik dalam teks *recount*

   ➢ Mengidentifikasi ide pokok dalam teks *recount*

   ➢ Memahami informasi yang penting dalam teks *recount*

   ➢ Memahamai kosa kata yang terdapat dalam esei pendek berbentuk *recount*

   ➢ Menyimpulkan informasi yang terdapat dalam teks Recount

   ➢ Menjawab pertanyaan berdasarkan informasi yang ada dalam esei pendek berbentuk *recount*.

2. Tujuan Pembelajaran:

Pada akhir pembelajaran siswa diharapkan:

➢ Siswa mampu membaca dan memahami teks *recount*

➢ Siswa mampu Mengidentifikasi topik dalam teks *recount*

➢ Siswa mampu Mengidentifikasi ide pokok dalam teks *recount*

➢ Siswa mampu Memahami informasi yang penting dalam teks *recount*

➢ Siswa mampu Memahamai kosa kata yang terdapat dalam esei pendek berbentuk *recount*

➢ Menyimpulkan informasi yang terdapat dalam teks *recount*.

➢ Siswa mampu Menjawab pertanyaan berdasarkan informasi yang ada dalam esei pendek berbentuk recount.

3. Materi Pembelajaran:

- Teks monolog berbentuk Recount

4. Metode Pembelajaran : P2R (Preview, Read, Review) Strategy

5. Langkah-langkah Kegiatan

A. Pendahuluan

Apersepsi:

- Tanya jawab mengenai teks tulis fungsional dan essai pendek sederhana berbentuk *Recount* yang berkaitan dengan lingkungan terdekat.

Motivasi:

- Menjelaskan pentingnya materi yang akan dipelajari berikut kompetensi yang harus dikuasai siswa.

B. Kegiatan inti

Dalam kegiatan inti, Guru:

o Guru menyajikan bahan ajar yang berhubungan dengan pelajaran

- Guru Menjelaskan Strategi P2R (Preview, Read, Review) berikut dengan langkah-langkahnya.
- Guru memodelkan membaca dengan menggunakan P2R (preview, Read, Review) strategy dalam memahami teks bacaan yang bersangkutan dengan pelajaran.
- Guru memberikan waktu kepada siswa untuk membaca sekilas teks yang dipelajari.
- Guru menugaskan siswa membaca dalam memahami teks yang dibaca dengan menggunakan strategi P2R yang sudah di modelkan sebelumnya.
- Guru memberikan waktu yang cukup kepada siswa untuk memahami isi bacaan dengan mereview bacaan.
- Memfasilitasi terjadinya interaksi antar peserta didik dan guru, lingkungan dan lainnya.
- Melibatkan peserta didik secara aktif dalam setiap kegiatan pembelajaran.
- Guru memberikan pertanyaan-pertanyaan tentang isi teks untuk menguji pemahaman siswa.

C. Penutup

Dalam kegiatan penutup, Guru:

- Guru bersama siswa Memberi simpulan tentang materi yang dipelajari dan mencatat informasi yang penting.
- Memberkan penilaian berupa latihan-latihan untuk mengetahui sejauh mana kemampuan siswa.

6. Alat/Sumber Belajar:
- Buku yang relevan
- Dictionary
- Papan Tulis

- Kapur
- Penghapus

7. Penilaian

Indikator pencapaian kompetensi	Teknik penilaian	Bentuk instrument	Instrument soal
1. Mengidentifikasi topik yang terkait dalam teks berbentuk recount. 2. Mengidentifikasi kalimat pokok yang terdapat dalam teks. 3. Mengidentifikasi informasi penting yang terdapat dalam teks. 4. Memahami kosa-kata yang terdapat dalam teks. 5. Menarik kesimpulan yang ada dalam teks.	Tes tulisan	Pilihan Ganda	Read the text carefully and then choose the correct answer based on the text by crossing a, b, c, or d.

a. Pedoman penilaian

- Jumlah skor maksimal keseluruhan adalah 100.

- Setiap jawaban yang benar diberi skor 5. Jumlah skor keseluruhan

   5x20 =100. (Test Tertulis)

- Nilai Maksimal = <u>Jumlah jawaban yang benar</u>

   Jumlah soal

b. Instrument: Answer the Questions based on the text!

c. Rubrik Penilaian

Uraian	Skor
Jawaban benar	5
Wrong Answer	0

Padangidimpuan,   Juli 2014

Validator   **Researcher**

Sojuangon Rambe., S. S., M. Pd   **Ermina Seriwaty Nainggolan**
NIP. 19790815 200604 1 003   **10 340 0003**

Padangidimpuan,   Juli 2014

Mengetahui
Kepala Sekolah   Peneliti
MTs N 2 Padangsidimpuan

Drs. H. M. Basyri Nasution   **Ermina Seriwaty Nainggolan**
NIP. 19591009 1986003 1005   **NIM. 10 340 0003**

RENCANA PELAKSANAAN PEMBELAJARAN
(RPP)

Nama Sekolah   : MTs Negeri 2 Padangsidimpuan

Mata Pelajaran   : Bahasa Inggris

Kelas/Semsester   : $VIII^4$ (Delapan)/II (genap)

Alokasi Waktu   : 4 x 40 menit (2 x Pertemuan)

Standar Kompetensi : Memahami makna dalam esei pendek sederhana berbentuk *recount* untuk berinteraksi dengan lingkungan sekitar.

Kompetensi dasar   : Membaca nyaring bermakna teks fungsional dan esei pendek sederhana berbentuk *recount* dengan menggunakan ragam bahasa tulis secara akurat, lancar dan berterima untuk berinteraksi dengan lingkungan sekitar.

Jenis teks   : Recount Text

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- ➢ Mengidentifikasi ide pokok dalam teks *recount*
- ➢ Memahami informasi yang penting dalam teks *recount*
- ➢ Memahamai kosa kata yang terdapat dalam esei pendek berbentuk *recount*
- ➢ Menyimpulkan informasi yang terdapat dalam teks Recount
- ➢ Menjawab pertanyaan berdasarkan informasi yang ada dalam esei pendek berbentuk *recount*.

2. **Tujuan Pembelajaran:**

   ➢ Siswa mampu membaca dan memahami teks *recount*

   ➢ Siswa mampu Mengidentifikasi topik dalam teks *recount*

   ➢ Siswa mampu Mengidentifikasi ide pokok dalam teks *recount*

   ➢ Siswa mampu Memahami informasi yang penting dalam teks *recount*

   ➢ Siswa mampu Memahamai kosa kata yang terdapat dalam esei pendek berbentuk *recount*

   ➢ Menyimpulkan informasi yang terdapat dalam teks *recount*.

   ➢ Siswa mampu Menjawab pertanyaan berdasarkan informasi yang ada dalam esei pendek berbentuk recount.

3. **Materi Pembelajaran:**

   - Teks monolog berbentuk Recount

4. **Metode Pembelajaran** : Conventional Strategy

5. **Langkah-langkah Kegiatan**

   A. Pendahuluan

   Apersepsi:

   - Tanya jawab mengenai teks tulis fungsional dan essai pendek sederhana berbentuk *Recount* yang berkaitan dengan lingkungan terdekat.

   Motivasi:

   - Menjelaskan pentingnya materi yang akan dipelajari berikut kompetensi yang harus dikuasai siswa.

   B. Kegiatan inti

   Dalam kegiatan inti, Guru:

   o Guru menyajikan bahan ajar yang berhubungan dengan pelajaran

   o Menggunakan alat Visualisasi, seperti papan tulis atau media yang tersedia untuk menjelaskan pokok bahasan yang disampaikan.

o Guru menjelaskan arti, karakteristik dan isi dari teks *Recount*.

o Guru memberikan contoh dan penjelasan contoh dari Recount teks dan komponen-komponen teks Recount.

o Membiasakan peserta didik membaca dan menulis yang beragam melalui tugas-tugas tertentu yang bermakna

o Guru menugaskan siswa untuk membaca teks dalam memahami teks yang dipelajari.

o Guru memberikan penjelasan tentang kosa-kata dan tata bahasa yang berkaitan dengan teks Recount yang dibaca.

o Memfasilitasi terjadinya interaksi antarpeserta didik dan guru, lingkungan dan lainnya.

o Melibatkan peserta didik secara aktif dalam setiap kegiatan pembelajaran.

o Guru memberikan pertanyaan-pertanyaan tentang isi teks untuk menguji pemahaman siswa.

C. Penutup

Dalam kegiatan penutup, Guru:

o Guru bersama siswa Memberi simpulan tentang materi yang dipelajari dan mencatat informasi yang penting.

o Memberkan penilaian berupa latihan-latihan untuk mengetahui sejauh mana kemampuan siswa.

6. Alat/Sumber Belajar:
- Buku yang relevan
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- Penghapus

7. Penilaian

Indikator pencapaian kompetensi	Teknik penilaian	Bentuk instrument	Instrument soal
6. Mengidentifikasi topik yang terkait dalam teks berbentuk recount. 7. Mengidentifikasi kalimat pokok yang terdapat dalam teks. 8. Mengidentifikasi informasi penting yang terdapat dalam teks. 9. Memahami kosa-kata yang terdapat dalam teks. 10. Menarik kesimpulan yang ada dalam teks.	Tes tulisan	Pilihan Ganda	Read the text carefully and then choose the correct answer based on the text by crossing a, b, c, or d.

d. Pedoman penilaian

- Jumlah skor maksimal keseluruhan adalah 100.

- Setiap jawaban yang benar diberi skor 5. Jumlah skor keseluruhan 5x20 =100. (Test Tertulis)

- Nilai Maksimal = $\dfrac{\text{Jumlah jawaban yang benar}}{\text{Jumlah soal}}$

e. Instrument: Answer the Questions based on the text!

f. Rubrik Penilaian

Uraian	Skor
Jawaban benar	5
Wrong Answer	0

Padangidimpuan,   Juli 2014

Validator   **Researcher**

Sojuangon Rambe., S. S., M. Pd   **Ermina Seriwaty Nainggolan**
NIP. 19790815 200604 1 003   **10 340 0003**

Padangidimpuan,   Juli 2014

Mengetahui

Bapak Kepala   Peneliti
MTs N 2 Padangsidimpuan

Drs. H. M. Basyri Nasution   **Ermina Seriwaty Nainggolan**
NIP.   19591009 1986003 1005   **NIM. 10 340 0003**

Learning Material

A. Recount Text:

Communicative Purpose: to retell events for the purpose of informing and entertaining.

B. Kinds Of Recount Text

1. Personal Recount; retelling of an activity that the writer/speaker has been personally involved in.

2. Factual Recount; recording the particulars of an incident

3. Imaginative Recount; taking on imaginary role and giving details of events.

4. Generic Structure of Recount Text

1. Orientation; give background information about the events (who is involved, where happened, and when it happened).

2. Events; tell what happened in chronological order.

3. Re-orientation; to close the events with the writer's impression about the event.

5. Language Features

1. Using Personl Participant; I, my family, we, etc.,

2. Use Past Tense; arrived,

3. Use temporal connectives/temporal sequence events; last holiday, then, next, after, and, before, etc.,

4. Using Action verb; went, etc.,

5. Using linking items to do with time; was, were.

6. Example of Recount Text

MY HOLIDAY

Orientation

I went to Bandung last holiday with my family. We went there by my car. I took long time to reach Bandung. It was about 2 hours and we had so many traffics in Bandung. As people could see, Bandung is almost same like Jakarta, but the differences are in its culture. Not only that, Bandung also had so many cold areas like Ciater etc. It was so wonderful in Bandung. I could release all my things at there.

Event

After we arrived in Bandung city, we had a look in another place like ITB, UNPAD, TELKOM etc. Then we had a lunch in a small restaurant. After lunch, we continued our way to Ciater. Hopeless, it had a big traffic in the way to Ciater. So we stop in a café until evening. Then we continue our way. It was so dark and it was scary in the left or right side. Only trees that we could see because we were pick the way to the higher place. Finally we arrived in Ciater.

Event

Ciater was so cold and comfortable. It was nice and well-known as its sulfur bath. But although it was night, the temperature was cold, it still hot in the sulfur pool. Not only that, the sulfur bath was so skinny and we mustn't let our eyes touch the water. Sulfur is almost same like salt. It could make our eyes hurt. But the advantage of sulfur bath is we can make our skin became light and fresh. Then after I took bath, I went to sleep.

Event

The next day was my last day in Bandung, so I must spend it rightfully. The first thing that I do is riding a horse. It was nice to ride horse when the air was fresh and comfortable. After that, I went to strawberry garden. At there I know the process of harvest a strawberry. After that, I went back to the bungalows and packing. After we checked out, we went to a Sudanese restaurant to have a lunch. The food was delicious. After we had a lunch, we went to Cihampelas. This is the most crowded place in Bandung because it was the last place that everyone visited before coming back to Jakarta. There were many shops and places to visit, like instrument shop, tattoos, etc.

Re-orientatio

After having fun, we went home. It was a wonderful holiday because it was the first time I went to Bandung. Although it was pretty quick, it was wonderful to visit Bandung and make many friends.

Bacharuddin Jusuf Habibie

Prof. DR (HC). Ing. Dr. Sc. Mult. Bacharuddin Jusuf Habibie or BJ Habibie known as (73 years) is a man Pare - Pare (South Sulawesi) born June 25, 1936. Habibie became the 3rd President of Indonesia for 1.4 years and 2 months to become Vice- President.

In his chilhood, Habibie has shown intelligence and high spirits on science and technology, particularly physics. For six months, he enrolled in the Mechanical Engineering Institute of Technology Bandung (ITB), and continued to Rhenisch Wesfalische Tehnische Hochscule - Germany in 1955. Then, Mr. Habibie Continued doctoral program after marrying his friend in senior high school, Mrs. Hasri Ainun Habibie in 1962.

After graduation, BJ Habibie working in Messerschmitt - Bolkow - Blohm MBB or Hamburg (1965-1969 as Head of Research and Development at Struktrur Analysis of Aircraft, and later served as Chief of the Division of Methods and Technologies in industrial, commercial and military aircraft in MBB (1969- 1973).

Before entering the age of 40 years, Habibie designed and constructed of aircraft. Habibie began to really focus after it releases high positions in the German MBB Aircraft Company in 1978.

His great sense of love for his wife poured in book form. He wrote a book entitled "Habibie & Ainun". This book is made for his wife. The book contains the love story of the Professor with his wife.

Appendix 3

Name :

Class :

Instruction: choose the correct Answer by crossing (X) A, B, C, or D!

Text 1

Line 1
Every April 21 people in Indonesia commemorate the Kartini's day. It was beautiful day for the woman because we celebrate the birth of great lady R.A. Kartini. Everyone knew who Kartini was. She is our national heroine and a great lady with the bright idea.

Line 5
Kartini was born in 1879 April 21 in Mayong Jepara. Her father was Rama Sosroningrat a Wedana (assistant of head of regency) in Mayong. Her mother, Ma Ngasirah was a girl from Teluk Awur village in Jepara as the daughter of a noble family, she felt lucky because she got more than the ordinary people got. She got better education than other children. In November 12th 1903 she married Adipati Djoyodiningrat, the head of Rembang regency. According to Javanese tradition Kartini had to follow her husband. Then she moved to Rembang.

Line 15
In September 13th 1904 she gave a birth to her son. His name was Singgih. But after giving birth to a son, her condition was getting worse and she finally passed away on september 17th 1904 on her 25 years old.

Line 19
Now Kartini has gone, but her spirit and dream will always be in our heart. Nowadays Indonesian women progress is influenced by Kartini's spirit stated on collection of letter "Habis Gelap Terbitlah Terang" or From the Dusk to the Dawn.

1. The text above talks about ….
    A. Kartini's day
    B. R. A. Kartini
    C. The Dusk to the Down
    D. Women emancipation

2. What is the main idea of the first Paragraph?
    A. She is our national heroine
    B. Great lady R.A. Kartini.
    C. Every April 21 people in Indonesia commemorate the Kartini's day.
    D. The beautiful lady in Indonesia

3. The word "has gone" (the last paragraph, line 19) has the same meaning with ….
    A. Passed away
    B. Go out
    C. Went home
    D. Die

4. Kartini is a national heroin and ….with the bright idea.
    A. Beautiful lady
    B. Smart lady
    C. Honest lady
    D. Great lady

Text 2

Line 1   Albert Einstein was born in 1879 in Germany. He graduated from the University of Zurich in Switzerland in 1905. In 1905 he also did famous works in Physics. In 1919 he won the Noble Prize in Physics. Between 1919 and 1933 he lived in Germany and traveled a lot to talk to other scientists. Then, in 1993 he had to leave Germany

Line 6   because of Hitler and Nazi Party. He moved to United States from1933 until his death. He lived in Prince town, New Jersey. He died on 18th 1955.

5. What is the topic of the text?
    A. Albert Einstein's Study
    B. The life of Albert Einstein
    C. Albert Einstein childhood
    D. Albert Einstein hometown

6. Which of the following statements are true according to the text?
    A. Albert Einstein died on the age 75 years old.
    B. Albert Einstein had lived for 14 years in Germany.
    C. Albert Einstein had done some famous works in physics after 1905.
    D. Albert Einstein got the Noble Prize in Physics when he was 50 years old.

7. The word "graduated" (line 1) synonym with ….
   A. Alumnus
   B. Passed
   C. Finish
   D. Study

8. From the text above, it concludes that Albert Einstein ….
   A. Albert Einstein is a Germany
   B. Albert Einstein is a scientist in Physics
   C. Albert Einstein is a historian
   D. Albert Einstein is an expert in Match.

Text 3

Line 1   The day when I went home from office was a terrible day. I was driving along the coast road when the car suddenly lurched to one side.
          At first I thought a tire had gone but then I saw telegraph poles collapsing like matchsticks which flashed and burnt.

Line 6   The rocks that tumbled across the road almost hit my car and tried to abandon it. When I got back to town where many people crowded on the road, I saw some houses collapsed, the bridge had a crack, and the people said that the earthquake happened a few minutes ago.

Line 11   Fortunately, the earthquake did not collapse my home. I thanked God happily because my wife and children were safe.

9. The text tells about …..
   A. A terrible day
   B. Earthquake
   C. Flood
   D. Storm

10. What is mainly discussed in the third paragraph?
   A. The rocks that tumbled across the road almost hit my car and tried to abandon it.
   B. There were many people crowded on the road
   C. The earthquake happened a few minutes ago.
   D. Some houses collapsed, the bridge had a crack.

11. The text below gave the conclusion of the text above, except ….
    A. He thanked God because his family was safe.
    B. The Earthquake collapsed his house.
    C. There were some houses collapsed and the bridge had a crack.
    D. Telegraph poles collapsing like matchsticks which flashed and burnt.

12. How did the man know the Earthquake based on the text?
    A. He saw houses collapsed, the bridge had a crack, and the people said that the earthquake happened
    B. His wife informed to him that the earthquake happened.
    C. His car suddenly lurched to one side.
    D. People ran out to his house.

Text 4

Line 1   The student in the second level of SMP 2 Yogyakarta went to Bali last year for study tour. At 7 o'clock in the morning, the students went to Bali by bus. They were very enjoyable in the traveling. They sang some pop songs and made some games. They also exchange their snack each other. At 12 o'clock a.m., they stayed for an hour to have supper and took a rest in a restaurant. They were served with a lot of foods such as sate, noodle, meatball, and soup. Some of them ate sate, and the others ate meatball and noodle. They were very satisfied with the restaurant service.

Line 11   One hour later, they came into the bus and continued their travelling. During the trip, most of them slept. Only some of them read some comics and listened to the music. At 6.00 p.m. they crossed the straits by ship. Lastly, they arrived in the Hotel.

Line 15   During three days, they went to Sanur Beach, Bedugul, Pure Bekasih, kute Beach, Tanah Lot and Sangeh. They were the beautiful places that would never be forgotten. In the next morning, they came back to Yogyakarta.

13. The text is about ….
    A. Beach in Bali
    B. Traveling to Bali
    C. My Vacation
    D. Traveling by Bus

14. What is the main information of the last paragraph?
    A. Visiting some beautiful places in Bali.
    B. They came back to Yogyakarta
    C. Sanur Beach is very interesting Beach.
    D. That was a disappointed traveling.

15. Which places was not visited by them in Bali?
    A. Kute
    B. Sanur Beach
    C. Sangeh
    D. Tulamben

16. In conclusion, how was the travelling based on the text above?
    A. It was boring
    B. It was not interesting
    C. It was enjoyable
    D. It was terrible

Text 5

Line 1   The tour to Pangandaran Beach started on holiday last semester. We decided to go to Pangandaran Beach by our motorbike. That was very interesting tour. Riding a motorbike from my hometown, Cirebon, to Pangandaran Beach with my best friends made me feel exited.

Line 6   The tour to Pangandaran Beach began at 09.00 a.m. in the morning. It took 5 hours riding to Pangandaran Beach. There were so many story that my friends and I got when we were in the tour such as there was my friend who got lost, ran out of fuel in the middle of jungle, and so forth. But it was interesting, because it was the first moment that I ever had in touring.

Line 12   We arrived at Pangandaran Beach at 02.00 p.m. and we straight to move to the beach. At beach we just lied down there to stretch our muscle because of 5 hours riding. We also had a lunch there by eating some foods that we brought from Cirebon. That was very nice moment when we shared our own food to others.

Line 17   After we had enough rest, we began to explore Pangandaran Beach. It was started by exploring the beach, and the sea using rented boat. Then we went to dive by renting some diving equipment. We

could see many coral there. We just had 2 hours to enjoy Pangandaran Beach because we had to come back to Cirebon.

Line 22   We came back to Cirebon at 04.00 p.m. It was impossible to ride in the night, so we just decided to stay over in our friend house in Ciamis and we started to come back in the morning. That was very nice experience that I and my friends ever had. We would never forget that moment.

17. The text above tells us about ….
    A. Pangandaran beach
    B. Pangandaran sea
    C. The panorama of Pangandaran
    D. Travelling

18. What is the main idea of the second paragraph is ….
    A. The tour to Pangandaran Beach began at 09.00 a.m.
    B. It was the first moment that I ever had in touring.
    C. There were so many story that we got in the tour.
    D. We arrived at Pangandaran Beach at 02.00 p.m.

19. The word "shared" (paragraph 3, line 16) closest meaning to ….
    A. Divided
    B. Exchanged
    C. Gave
    D. Asked

20. From the text above, it may conclude that Pangandaran Beach ….
    A. Pangandaran beach is a beautiful beach
    B. Pangandaran beach is terrible beach
    C. Pangandaran beach is a bad beach with the sea.
    D. Pangandaran beach is a little beach

Validator

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Appendix 4

<div align="center">

Instrument Post Test
</div>

Name :
Class :
Instruction: choose the correct Answer by crossing (X) A, B, C, or D!

Text 1

Line 1   Lightning struck many times by our houses last night during a rainstorm. One flash of lightning hit at 10.45 p.m., at the second hit at 11:00 p.m. We heard the sound of the thunder and we smelled the lightning in the air.

Line 5   The first flash struck our neighbor house, and it acted like a lightning rod. It pulled the lightning to it. When the lightning struck, it tore out a whole row of bricks walls. Our neighbor said that the lightning killed the tree.

Line 9   We were lucky. The lightning missed our house. And we were all happy that nobody was hurt

1. What the text discussed?
   A. Storm
   B. Thunder
   C. Lightning
   D. Rainstorm

2. What the main information of the text?
   A. Lightning struck many times by our houses last night during a rainstorm.
   B. Lightning struck my neighbor house
   C. Lightning tore out a whole day.
   D. We smelled lightning in the air.

3. How many times the lightning hit based on the text above?
   A. once
   B. Twice
   C. Three times
   D. Four times

4. The word "lucky" (paragraph 3, line 9) is synonym with …..
   A. Fortune
   B. Success
   C. Benefit
   D. Unfortuna

Text 2

Line 1   Last holiday, my friends and I went camping on the mountain. We went to Guci, Tegal. The spot is near from our town. It is about 2 hours to get there. We choose Guci because it is not too far from settlement.

Line 5   We prepared everything before going on camping. The boys prepared the tents, the girls prepared the food, and I checked the accommodations. We brought cooking utensils and the food from home, clothes, camera, guitar, etc. We went there by a car and a motorcycle for unwanted condition. We went there in the sunny morning and hoped no rain during camping.

Line 11   On the first day, we sat up the tent on the spot near waterfall. The girls made the fence of the area but the boys took a bath on the river. Then, we cooked the food for the lunch, had lunch together, tried to fish in the river but we got a sandal.

Line 15   On the second day, we had some activities. We went on hiking up the mountain, took some pictures in tea garden, and picked strawberry. The last night of our camping was so cold, we made a campfire, sang song together and told spooky stories which made us fear.

Line 20   We had camping for about three days. On the last day, we packed everything we bought. we cleaned the area and made sure there was nothing left except our footprint. We didn't took anything except took photos, we remembered that we must keep the nature, friendly with them and they will be friendly with us. We made a memory by taking photos together in front of a waterfall and then went home happily. We felt very tired.

5. The main idea of the second paragraph is ….
   A. We brought cooking utensil.
   B. We prepared everything before going on camping.
   C. We went there in the sunny morning.
   D. We choose Guci because it is not too far from settlement.

6. How long that they had camping in Guci, Tegal?
   A. Two days
   B. A week
   C. Four days
   D. Three days

7. Spooky (paragraph 4, line 18) has the same meaning with …..
   A. Terrible
   B. Horrible
   C. Funny
   D. Nice

8. The conclusion of the text is that camping was ….
   A. Confortable
   B. Terrible
   C. Horrible
   D. Disappointed

Text 3

Line 1   Last week, I went to Yogyakarta with my family. My father drove the car. My mother sat beside him. My sister and I sat in the back seats. We woke up early in the morning. My father prepared the car in the garage while mother was preparing food for breakfast and some snacks for us. My sister and I packed some clothes. After everything got ready and we had our breakfast, we left the house at six o'clock. It was about nine A.M.

Line 8   We arrived at Yogyakarta. First of all we visited our uncle. We stayed there for an hour. Then we went to Parangtritis beach. We got there at eleven o'clock. There were a lot of tourists because it was holiday. I saw many foreign visitors too. My parents watched us playing with sand in the beach. We did not swim and take a bath since the wave was rough. After having lunch, we went on our picnic to the museum and Malioboro shopping center. We drove back to Semarang at 7 o'clock and arrived home at ten. We were tired but happy.

9. What is the main idea of the text?
   A. We went there at Morning.
   B. We left the house at six o'clock.
   C. We went to Yogyakarta by car
   D. Last week, I went to Yogyakarta with my family.

10. The word "Stayed" (paragraph 2, line 9) is same with ….
    A. Lived
    B. Leave
    C. Life
    D. Abandoned

11. The conclusion of the text above is ….
    A. The author is very happy visiting Yogyakarta.
    B. Visiting Yogyakarta is very wonderful
    C. Yogyakarta was a nice place
    D. There are many interesting places in Yogyakarta.

Text 4

Line 1   The bomb, in the resort of Kuta, destroyed the Sari Club and a crowded nightspot. Many people have fallen victims to this blast. Many of them were foreign tourists, especially from Australia. They were burned beyond recognition. Some tourist who were at the scene of the blast said there were two explosions around the nightclub. One bomb had exploded outside Paddy's Bar before a Bar bomb hit the Sari Club which was located some meters away.

Line 8   Hundred were injured in the explosion and about 220 Australians remain unaccounted for. The U.K. Foreign Secretary, Jack Straw, said that 33 Britons were among those killed in the Bali attack. The Australian Prime Minister, John Howard, called its borders, saying it had been a problem for a long time.

Line 13   Lists of missing people have been posted in Bali. And official said that it could take days to identity all the victims, some of whom were trapped in the Sari Club by a wall of flames. A notice board at the hospital in Bali includes a section called "Unknown Identity" and detailed list on victims such as: "Young girl in intensive care, 11-14 years old, face burned, income, Causation," or "Girl in intensive care, about 5 years old, 130 cm, fair skin, Caucasian with reddish brown hair. She has a purplish belly button ring."

Line 21   Many embassies, including the British and the American, are advising their people to cancel spending their planned holidays in Indonesia, and all U.S. citizens in the country have been told to leave including diplomats and non-essential government staff.

12. What the text talked about?
    A. Bomb in Bali
    B. Resort Kuta
    C. Disaster
    D. Flood

13. The important information of the third paragraph is ….
    A. the British and the American, are advising their people to cancel spending their planned holidays in Indonesia
    B. Some of whom were trapped in the Sari Club by a wall of flames.
    C. Hundred were injured in the explosion and about 220 Australians remain unaccounted for. The U.K.
    D. Lists of missing people have been posted in Bali.

14. How many people were injured based on the text above?
    A. 220 Australians remain unaccounted for. The U.K. Foreign Secretary and 33 killed.
    B. All the people surrounded
    C. 227 people and 33 killed
    D. The people around the beach.

15. The word in paragraph 1 (blast) synonym with ….
    A. Explosion
    B. Shaking
    C. Eruption
    D. Spraying

Text 5

Line 1   The first President of the Republic of Indonesia, Sukarno, who used to be called Bung Karno, was born in Blitar, East Java, on June 6th 1901 and died in Jakarta, June 21st 1970. He formulated and established the doctrine Marhaenism PNI (Nationalist Party Indonesian) on July 4th 1927, with the goal of independent Indonesia. The defense made the Dutch more and more angry. So that in July 1930, the PNI was dissolved. After being released in 1931, Sukarno joined Partindo and at the same time led. As a result, he was re-arrested by the Dutch and exiled to Ende, Flores, 1933. Four years later moved to Bengkulu.

Line 12   After a long struggle, Bung Karno and Bung Hatta proclaimed Indonesia's independence on August 17th 1945. During the session BPUPKI June 1st 1945, Ir. Soekarno put forward the idea of a basic stated Pancasila. On August 17th 1945, Ir Soekarno and Drs. Mohammad Hatta proclaimed Indonesian independence. In the trial PPKI, August 18th 1945, he unanimously elected as the first President of the Republic of Indonesia.

Line 20   Previously, he also managed to formulate that later became the basis of Pancasila (ideology) of the Unitary Republic of Indonesia. He sought to unite the archipelago. Even Sukarno tried to gather the nations of Asia, Africa, and Latin America to the Asian-African Conference in Bandung in 1955, which later evolved into the Non-Aligned Movement.

Line 28   G-30-S/PKI uprising spawned the political crisis intense that led to reject of the Assembly over the responsibility. Instead the Assembly appointed Soeharto as Acting President. His health continued to deteriorate, which is on Sunday, June 21st 1970 he died at the army hospital. He was buried at Wisma Yaso, Jakarta and was buried in Blitar, East Java near the tomb of his mother, Ida Ayu Nyoman Rai. The Government conferred as "The National Proclamation Hero."

16. What the text is about?
    A. The life of the Soekarno
    B. The hometown of the Soekarno.
    C. The prize of the Soekarno
    D. The study of Soekarno

17. What the main information from paragraph 4?
    A. He formulated and established the doctrine Marhaenism PNI (Nationalist Party Indonesian).
    B. He proclaimed the Unitary of Republic Indonesia.
    C. He managed to formulate that later became the basis of Pancasila (ideology) of the Unitary Republic of Indonesia.
    D. He is a first President of Unitary Republic of Indonesia.

18. Soekarno is called as a ….
    A. National hero
    B. National Proclamation Hero
    C. Political
    D. Vice-president

19. The word "struggle" (paragraph 2, line 12) has the same meaning with ….
    A. War
    B. Fight
    C. Strange
    D. Hassle

20. From the text above, the text concluded the right statement about Soekarno, except….
    A. Soekarno is a first president of Unitary Republic of Indonesia
    B. Soekarno proclaimed the Unitary Republic of Indonesia.
    C. Soekarno formulated the ideology of the Unitary Republic of Indonesia.
    D. Soekarno was not a first president of the Unitary Republic of Indonesia.

Validator,

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NIP. 19790815 200604 1 003

Appendix 5

Key Answer

A. Pre-Test

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

B. Post-Test

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

Validity Pre Test

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Xt	Xt²
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32	0	0	0	1	0	0	0	1	1	1	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1	11	121

																										∑xt	∑xt²
33	1	0	1	0	1	1	0	0	1	0	0	1	0	1	0	0	0	1	0	1	1	1	1	1	0	13	169
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37	0	0	1	1	1	0	1	0	0	1	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	9	81
38	1	0	0	1	1	1	1	0	1	0	1	1	0	0	1	1	0	0	0	1	0	0	1	0	0	11	121
39	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	1	1	1	0	1	20	400
N=39	30	26	26	30	25	21	18	27	18	22	22	30	21	21	24	26	13	16	22	17	32	23	26	15	18	555	8357
p	0,8	0,7	0,7	0,8	0,6	0,5	0,5	0,7	0,4	0,6	0,6	0,8	0,5	0,5	0,6	0,3	0,3	0,4	0,6	0,4	0,8	0,6	0,7	0,4	0,4	∑xt	∑xt²
q	0.2	0.3	0.3	0.2	0.4	0.5	0.5	0,3	0.6	0,4	0.4	0.2	0.5	0.5	0.4	0.7	0.7	0.6	0.4	0.6	0,2	0.4	0.3	0,6	0.6		
Mp	14,93	15,38	15,00	15,16	14,36	15,47	14,27	15,07	15,88	15,27	15,36	14,93	15.04	16,04	15.50	16,38	16,83	18,68	15,27	15,40	15,09	15,91	14,88	15,73	15,50		
Rpbi	0,408	0,509	0,340	0,542	0,036	0,361	0,011	0,370	0,481	0,369	0,401	0,408	0,236	0,527	0,451	0,369	0,495	1,053	0,369	0,292	0,500	0,596	0,409	0,354	0,370		
	valid	valid	valid	valid	invalid	valid	invalid	valid	valid	valid	valid	valid	invalid	valid	valid	valid	valid	valid	valid	invalid	valid	valid	invalid	valid	valid		

Appendix 7

Table 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.	14.93	14.23	3.43	0.8	0.2	0.408	0.325	Valid
2.	15.38	14.23	3.43	0.7	0.3	0.419	0.325	Valid
3.	15.00	14.23	3.43	0.7	0.3	0.340	0.325	Valid
4.	15.16	14.23	3.43	0.8	0.2	0.542	0.325	Valid
5.	14.36	14.23	3.43	0.6	0.4	0.036	0.325	Invalid
6.	15.47	14.23	3.43	0.4	0.6	0.361	0.325	Valid
7.	14.27	14.23	3.43	0.5	0.5	0.011	0.325	Invalid
8.	15.07	14.23	3.43	0.7	0.3	0.370	0.325	Valid
9.	15.88	14.23	3.43	0.4	0.6	0.481	0.325	Valid
10.	15.27	14.23	3.43	0.6	0.4	0.369	0.325	Valid
11.	15.36	14.23	3.43	0.6	0.4	0.401	0.325	Valid
12.	14.93	14.23	3.43	0.8	0.2	0.408	0.325	Valid
13.	15.04	14.23	3.43	0.5	0.5	0.236	0.325	Invalid
14.	16.04	14.23	3.43	0.5	0.5	0.527	0.325	Valid
15.	14.95	14.23	3.43	0.6	0.4	0.254	0.325	Valid
16.	16.38	14.23	3.43	0.7	0.3	0.409	0.325	Valid
17.	16.83	14.23	3.43	0.3	0.7	0.495	0.325	Valid
18.	18.68	14.23	3.43	0.4	0.6	1.053	0.325	Valid
19.	15.27	14.23	3.43	0.6	0.4	0.369	0.325	Valid
20.	15.00	14.23	3.43	0.4	0.6	0.181	0.325	Invalid
21.	15.09	14.23	3.43	0.8	0.2	0.500	0.325	Valid
22.	15.91	14.23	3.43	0.6	0.4	0.596	0.325	Valid
23.	14.88	14.23	3.43	0.3	0.7	0.232	0.325	Invalid
24.	15.73	14.23	3.43	0.4	0.6	0.354	0.325	Valid
25.	15.50	14.23	3.43	0.4	0.6	0.370	0.325	Valid

Appendix 8

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

A. Calculation of Pre-Test
1. **Means score from score total (M_t)**

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

$$M_t = \frac{555}{39} = 14.23$$

2. **Standard Deviation (SD_t)**

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

$$SD_t = \sqrt{\frac{8357}{39} - \left(\frac{555}{2739}\right)^2}$$

$$SD_t = \sqrt{214.28 - 14.23^2}$$

$$SD_t = \sqrt{214.28 - 202.49} = \sqrt{11.49} = 3.34$$

3. **Means Score (M_p)**

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

$$M_{p1} = \frac{\substack{18+22+20+16+14+13+12+19+13+13+13+17+11+14+18+18+12\\+16+9+15+20+15+18+13+13+13+13+14+11+20}}{30}$$

$$M_{p1} = \frac{448}{30} = 14.933$$

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

$$M_{p2} = \frac{\substack{22+20+16+14+13+12+10+19+14+13+13+13+10+17+11+14+\\12+16+15+20+15+18+13+20+20}}{26}$$

$$M_{p2} = \frac{391}{26} = 15.038$$

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

$$M_{p3} = \frac{\substack{18+22+20+16+13+12+10+19+14+10+17+9+11+14+18+16+9+20+15+18+\\+13+20+13+14+20+9}}{26}$$

$$M_{p3} = \frac{390}{26} = 15.00$$

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

$$M_{p4} = \frac{\substack{18+22+20+14+13+12+11+10+19+13+14+13+13+13+\\10+17+9+14+18+16+9+20+18+13+20+11+14+9+11+20}}{30}$$

$$M_{p4} = \frac{455}{30} = 15.66$$

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

$$M_{p5} = \frac{\begin{array}{c}22+16+14+13+12+19+14+13+13+17+11+14+18+12\\+9+15+15+13+20+13+13+13+9+11+20\end{array}}{25}$$
$$= \frac{359}{25} = 14.36$$

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

$$M_{p6} = \frac{18+22+20+13+12+19+13+13+10+11+16+9+15+20+18+13+13+13+11+20}{21}$$
$$= \frac{325}{321} = 15.476$$

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

$$M_{p7} = \frac{22+14+11+19+13+14+9+11+18+12+16+18+13+13+14+9+11+20}{18} = \frac{257}{18} = 14.277$$

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

$$M_{p8} = \frac{\begin{array}{c}18+22+20+14+13+11+10+19+14+13+13+13+10+9\\+11+14+18+12+9+15+13+20+11+13+14+11+20\end{array}}{27}$$
$$M_{p8} = \frac{407}{27} = 15.074$$

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

$$M_{p9} = \frac{\begin{array}{c}118+22+11+19+13+17+18+16+15+20+15\\+13+20+11+13+14+11+20\end{array}}{22} = \frac{286}{22} = 15.888$$

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

$$M_{p10} = \frac{\begin{array}{c}22+20+16+14+13+10+19+14+13+17+9+14\\+18+12+16+15+18+20+11+13+9+20\end{array}}{22}$$
$$M_{p10} = \frac{333}{22} = 15.13$$

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

$$M_{p11} = \frac{\begin{array}{c}22+20+22+10+19+14+13+13+13+17+11+14+18+16+15+\\20+15+18+13+13+20+13+11\end{array}}{22}$$
$$M_{p11} = \frac{338}{22} = 15.363$$

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

$M_{p12} = \dfrac{\begin{array}{c}18+22+20+16+14+13+13+10+17+9+11+14+18+12+16+\\9+20+15+18+13+20+11+13+13+13+14+9+11+20\end{array}}{30}$

$M_{p12} = \dfrac{448}{30} = 14.933$

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

$M_{p13} = \dfrac{\begin{array}{c}18+22+20+13+11+13+13+13+10+17+14+16+9\\+15+20+15+18+13+13+20+13\end{array}}{21}$

$M_{p13} = \dfrac{316}{21} = 15.047$

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

$M_{p14} = \dfrac{\begin{array}{c}18+22+20+16+14+12+19+13+9+14+18+16+20\\+15+18+13+20+13+13+14+20\end{array}}{21}$

$M_{p14} = \dfrac{337}{21} = 16.047$

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

$M_{p15} = \dfrac{\begin{array}{c}18+14+11+19+13+14+13+10+17+14+12+16+20+18+\\13+13+20+11+13+13+14+9+11+20\end{array}}{24}$

$M_{p15} = \dfrac{372}{24} = 15.500$

Item 16 $M_{p16} = \dfrac{\text{the total of students score that answer true item}}{n23}$

$M_{p16} = \dfrac{18+20+16+14+13+17+9+15+20+18+13+20+13+13+14+20}{13}$

$M_{p16} = \dfrac{213}{13} = 16.384$

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

$M_{p17} = \dfrac{18+22+20+16+13+13+17+12+20+18+13+20}{12}$

$M_{p17} = \dfrac{202}{12} = 16.833$

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

$M_{p18} = \dfrac{\begin{array}{c}18+22+20+19+13+14+13+18+16+20+15\\+18+13+20+13+20\end{array}}{16}$

$M_{p18} = \dfrac{299}{16} = 18.687$

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

$$M_{p19} = \frac{\substack{22+20+16+14+12+11+19+14+13+10+17+12+15+20 \\ +15+18+13+20+13+9+20}}{22}$$

$$M_{p19} = \frac{336}{22} = 15.272$$

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

$$M_{p20} = \frac{22+20+12+13+17+14+18+15+20+20+11+13+13+13+14+9+11+20}{17}$$

$$M_{p20} = \frac{263}{17} = 15.40$$

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

$$M_{p21} = \frac{\substack{18+22+20+16+14+13+11+10+19+13+14+13+13+13+17+9 \\ +11+14+18+12+16+9+15+20+15+18+13+20+11+13+13+20}}{32}$$

$$M_{p21} = \frac{483}{32} = 15.09$$

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

$$M_{p22} = \frac{\substack{18+22+20+16+13+12+11+19+13+13+10+11+18+12+16+15 \\ +15+18+20+13+13+14+20}}{23}$$

$$M_{p22} = \frac{366}{23} = 15.91$$

Item 23 $M_{p23} = \dfrac{\text{the total of students score that answer true item}}{n16}$

$$Mp23 = \frac{\substack{18+22+20+16+14+13+11+19+13+14+13+18+15 \\ +13+13+11+13+13+13+14+11+20}}{26}$$

$$M_{p23} = \frac{387}{26} = 14.884$$

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

$$M_{p24} = \frac{18+16+12+10+19+13+13+18+20+13+20+11+13+13+14}{15}$$

$$M_{p24} = \frac{213}{15} = 15.733$$

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

$$M_{p25} = \frac{18+22+20+16+14+13+12+11+10+13+18+15+20+15+13+11+14+20}{18}$$

$$M_{p25} = \frac{236}{18} = 15.277$$

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

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

$r_{pbi} = \frac{14.93 - 14.23}{3.43} \sqrt{\frac{0.8}{0.2}}$

$r = \frac{0.4}{3.43} \sqrt{4}$

$r = 0.204 \text{ x } 2 = 0.408$

Item 2 $r_{pbi} = \frac{15.38 - 14.23}{3.43} \sqrt{\frac{0.7}{0.3}}$

$r = \frac{1.15}{3.43} \sqrt{2.33}$

$r = -0.335 \text{ x } 1.52 = 0.509$

Item 3 $r_{pbi} = \frac{15.00 - 14.23}{3.43} \sqrt{\frac{0.7}{0.3}}$

$r = \frac{0.77}{3.43} \sqrt{2.33}$

$r = 0.224 \text{ x } 1.52 = 0.340$

Item 4 $r_{pbi} = \frac{15.16 - 14.23}{3.43} \sqrt{\frac{0.8}{0.2}}$

$r = \frac{0.93}{3.43} \sqrt{4}$

$r = 0.271 \text{ x } 2 = 0.542$

Item 5 $r_{pbi} = \frac{14.36 - 14.23}{3.43} \sqrt{\frac{0.6}{0.4}}$

$r = \frac{0.13}{3.43} \sqrt{1.5}$

$r = 0.037 \text{ x } 1.22 = 0.045$

Item 6 $r_{pbi} = \frac{15.47 - 14.23}{3.43} \sqrt{\frac{0.5}{0.5}}$

$r = \frac{1.24}{3.43} \sqrt{1}$

$r = 0.361 \text{ x } 1 = 0.361$

Item 7 $r_{pbi} = \frac{14.27 - 14.23}{3.43} \sqrt{\frac{0.5}{0.5}}$

$r = \frac{0.04}{3.43} \sqrt{1}$

$r = 0.011 \text{ x } 1 = 0.011$

Item 8 $r_{pbi} = \frac{15.07 - 14.23}{3.43} \sqrt{\frac{0.7}{0.3}}$

$r = \frac{0.84}{3.43} \sqrt{2.33}$

$r = 0.244 \text{ x } 1.52 = 0.370$

Item 9 $r_{pbi} = \dfrac{15.88 - 14.23}{3.43}\sqrt{\dfrac{0.4}{0.6}}$

$r = \dfrac{1.65}{3.43}\sqrt{0.66}$

$r = 0.481 \times 0.812 = 0.390$

Item 10 $r_{pbi} = \dfrac{15.27 - 14.23}{3.43}\sqrt{\dfrac{0.6}{0.4}}$

$r = \dfrac{1.04}{3.43}\sqrt{1.5}$

$r = 0.303 \times 1.22 = 0.369$

Item 11 $r_{pbi} = \dfrac{15.36 - 14.23}{3.43}\sqrt{\dfrac{0.6}{0.4}}$

$r = \dfrac{1.13}{3.43}\sqrt{1.5}$

$r = 0.204 \times 1.22 = 0.401$

Item 12 $r_{pbi} = \dfrac{14.93 - 14.23}{3.43}\sqrt{\dfrac{0.8}{0.2}}$

$r = \dfrac{0.7}{3.43}\sqrt{4}$

$r = 0.204 \times 2 = 0.408$

Item 13 $r_{pbi} = \dfrac{15.04 - 14.23}{3.43}\sqrt{\dfrac{0.5}{0.5}}$

$r = \dfrac{0.81}{3.43}\sqrt{1}$

$r = 0.236 \times 1 = 0.236$

Item 14 $r_{pbi} = \dfrac{16.04 - 14.23}{3.43}\sqrt{\dfrac{0.5}{0.5}}$

$r = \dfrac{1.81}{3.43}\sqrt{1}$

$r = 0.527 \times 1 = 0.527$

Item 15 $r_{pbi} = \dfrac{15.50 - 14.23}{3.43}\sqrt{\dfrac{0.6}{0.4}}$

$r = \dfrac{1.27}{3.43}\sqrt{1.5}$

$r = 0.370 \times 1.22 = 0.451$

Item 16 $r_{pbi} = \dfrac{16.38 - 14.23}{3.43}\sqrt{\dfrac{0.3}{0.7}}$

$r = \dfrac{2.15}{3.43}\sqrt{0.428}$

$r = 0.626 \times 0.654 = 0.409$

Item 17 $r_{pbi} = \dfrac{16.83 - 14.23}{3.43} \sqrt{\dfrac{0.3}{0.7}}$

$r = \dfrac{2.6}{3.43} \sqrt{2.33}$

$r = 0.758 \text{ x } 1.52 = 0.495$

Item 18 $r_{pbi} = \dfrac{18.68 - 14.23}{3.43} \sqrt{\dfrac{0.4}{0.6}}$

$r = \dfrac{4.45}{3.43} \sqrt{0.66}$

$r = 1.297 \text{ x } 0.812 = 1.053$

Item 19 $r_{pbi} = \dfrac{15.27 - 14.23}{3.43} \sqrt{\dfrac{0.6}{0.4}}$

$r = \dfrac{1.04}{3.43} \sqrt{1.5}$

$r = 0.303 \text{ x } 1.22 = 0.369$

Item 20 $r_{pbi} = \dfrac{15.00 - 14.23}{3.43} \sqrt{\dfrac{0.4}{0.6}}$

$r = \dfrac{0.77}{3.43} \sqrt{0.66}$

$r = 0.224 \text{ x } 0.812 = 0.181$

Item 21 $r_{pbi} = \dfrac{15.09 - 14.23}{3.43} \sqrt{\dfrac{0.8}{0.2}}$

$r = \dfrac{0.86}{2.116} \sqrt{4}$

$r = 0.250 \text{ x } 2 = 0.500$

Item 22 $r_{pbi} = \dfrac{15.91 - 14.23}{3.43} \sqrt{\dfrac{0.6}{0.4}}$

$r = \dfrac{1.68}{3.43} 1.5$

$r = 0.489 \text{ x } 1.22 = 0.596$

Item 23 $r_{pbi} = \dfrac{14.88 - 14.23}{3.43} \sqrt{\dfrac{0.7}{0.3}}$

$r = \dfrac{0.65}{3.43} \sqrt{2.33}$

$r = 0.189 \text{ x } 1.52 = 0.232$

Item 24 $r_{pbi} = \dfrac{15.73 - 14.23}{3.43} \sqrt{\dfrac{0.4}{0.6}}$

$r = \dfrac{1.5}{3.43} \sqrt{0.66}$

$r = 0.437\text{x } 0.812 = 0.354$

Item 25 $r_{pbi} = \dfrac{15.50 - 14.23}{3.43} \sqrt{\dfrac{0.5}{0.5}}$

$r = \dfrac{1.27}{3.43} \sqrt{1}$

$r = 0.370 \text{ x } 1 = 0.370$

Appendix 11

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

B. Calculation of Post-Test

    1. Means Score from Score Total (M_t)

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

$$M_t = \frac{583}{39} = 14.94$$

    2. Standard Deviation (SD_t)

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

$$SD_t = \sqrt{\frac{9253}{39} - \left(\frac{583}{39}\right)^2}$$

$$SD_t = \sqrt{237.256 - 14.96^2}$$

$$SD_t = \sqrt{237.256 - 223.203} = \sqrt{14.05} = 3.74$$

    3. Means Score (M_p)

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

$$M_{p1} = \frac{\begin{array}{c}20+23+20+19+20+15+16+19+16+19+16+14+14+1319\\+15+14+11+11+9+14+14+13+14+16+14+11+16+22+22\end{array}}{30}$$

$$M_{p1} = \frac{479}{30} = 15.96$$

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

$$M_{p2} = \frac{\begin{array}{c}20+23+20+19+14+20+15+16+19+16+19+12+16+9+14+12\\+13+15+14+11+9+14+13+14+14+16+14+11+16+22+22\end{array}}{31}$$

$$M_{p2} = \frac{485}{31} = 15.64$$

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

$$M_{p3} = \frac{\begin{array}{c}20+23+20+19+20+19+16+19+12+16+11+14+19+15+14+11+9\\+14+13+16+14+1112+16+9+22+22\end{array}}{27}$$

$$M_{p3} = \frac{426}{27} = 15.77$$

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

$$M_{p4} = \frac{\begin{array}{c}20+23+20+19+20+16+19+16+19+14+12+11+14+19\\+14+13+1416+14+11+16+11+22+22\end{array}}{25}$$

$$M_{p4} = \frac{409}{25} = 16.36$$

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

$$M_{p5} = \frac{\substack{20+23+20+19+20+16+12+16+9+14+12+11+19+15+14+11 \\ +14+14+16+9+11+22+22}}{23}$$

$$M_{p5} = \frac{259}{23} = 15.60$$

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

$$M_{p6} = \frac{\substack{20+19+14+20+19+19+16+9+14+12+14+19 \\ +15+9+14+14+14+16+14+11+22+22}}{22} = \frac{346}{22} = 15.72$$

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

$$M_{p7} = \frac{\substack{20+23+20+19+20+15+16+19+16+19+12+16+12 \\ +11+13+19+11+14+11+12+16+9+22+22}}{24} = \frac{387}{24} = 16.12$$

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

$$M_{p8} = \frac{20+23+20+19+14+20+15+16+19+19+14+14+13+16+22+22}{16}$$

$$M_{p8} = \frac{286}{16} = 17.87$$

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

$$M_{p9} = \frac{20+23+20+19+20+15+19+16+19+11+14+19+11+11+13+16+12+16+9+11+22+22}{22}$$

$$M_{p9} = \frac{358}{22} = 16.27$$

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

$$M_{p10} = \frac{20+23+20+19+14+19+14+12+13+19+14+11+14+14+13+14+14+16+14+12+22+22}{22}$$

$$M_{p10} = \frac{353}{22} = 16.04$$

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

$$M_{p11} = \frac{\substack{14+12+14+13+19+15+14+11+11+9+14+14+13+14+14 \\ +16+14+11+16+9+11+22+22}}{23}$$

$$M_{p11} = \frac{322}{23} = 15.34$$

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

$$M_{p12} = \frac{\substack{20+23+20+19+14+20+15+16+19+16+19+16+14+1114+13+19+15 \\ +14+11+14+13+14+11+22+22}}{26}$$

$$M_{p12} = \frac{424}{26} = 16.30$$

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

$$M_{p13} = \frac{20+23+20+19+14+20+16+19+9+12+13+19+15+14+14+16+14+16+22+22}{21}$$

$$M_{p13} = \frac{356}{21} = 16.95$$

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

$$M_{p9} = \frac{\begin{array}{c}20+23+20+19+14+20+15+19+16+19+12+16+9\\+14+12+11+14+19+15+14+11+11+9+14+14+16+14+11+12+16\end{array}}{30} = \frac{455}{30} = 15.16$$

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

$$M_{p15} = \frac{\begin{array}{c}20+23+20+19+14+20+15+16+19+16+19+12+16+11+14+15\\+14+114+16+9+11+22+22\end{array}}{23}$$

$$M_{p15} = \frac{369}{23} = 16.04$$

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

$$Mp_{16} = \frac{20+23+20+16+14+12+12+13+19+14+11+14+14+13+16+14+9+22+22}{18}$$

$$M_{p16} = \frac{286}{18} = 15.88$$

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

$$M_{p17} = \frac{23+20+20+15+16+19+16+19+16+9+11+14+16+22+22}{15}$$

$$M_{p17} = \frac{258}{15} = 17.20$$

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

$$M_{p18} = \frac{23+20+14+15+14+13+9+14+14+14+14+14+11+12+11+22+22}{17}$$

$$M_{p18} = \frac{276}{17} = 16.23$$

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

$$M_{p19} = \frac{\begin{array}{c}20+23+19+20+15+16+19+16+19+12+16+9+14+12+11+14\\+13+19+15+11+11+14+14+13+14=16+1411+12+16+22+22\end{array}}{32}$$

$$M_{p19} = \frac{502}{32} = 15.68$$

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

$$M_{p20} = \frac{\begin{array}{c}20+23+19+14+20+15+16+19+16+19+12+16+9+14+19+15+14\\+11+14+14+13+14+16+11\end{array}}{24}$$

$$M_{p20} = \frac{385}{24} = 16.04$$

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

$$M_{p21} = \frac{\begin{array}{c}23+19+1+20+15+16+19+16+19+12+16+9+12+11+14\\+13+15+11+14+14+13+14+16+14+11+12+22+2\end{array}}{27}$$

$$M_{p21} = \frac{426}{27} = 15.77$$

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

$$M_{p22} = \frac{23+20+14+16+9+12+16+19+11+9+14+12+16+11+22+22}{16}$$

$$M_{p22} = \frac{256}{16} = 16.62$$

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

$$M_{p23} = \frac{20+23+20+19+20+15+16+14+14+13+19+15+14+13+14+14+16+11+12+11+22}{22}$$

$$M_{p23} = \frac{351}{22} = 15.95$$

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

$$M_{p24} = \frac{\begin{array}{c}20+23+19+14+20+19+16+19+12+16+14+11+19+15+14\\+11+14+14++14+12+9+22+22\end{array}}{23}$$

$$M_{p24} = \frac{369}{23} = 16.04$$

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

$$M_{p25} = \frac{\begin{array}{c}20+23+20+20+15+16+19+16+19+12+16+14+13+19+9+14+14\\+16+14+12+9+22+22\end{array}}{23}$$

$$M_{p25} = \frac{374}{23} = 16.26$$

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

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

$r_{pbi} = \frac{15.96 - 14.94}{3.74}\sqrt{\frac{0.8}{0.2}}$

$r = \frac{1.02}{5.848}\sqrt{4}$

$r = 0.272 \text{ x } 2 = 0.544$

Item 2 $r_{pbi} = \frac{15.64 - 14.94}{3.74}\sqrt{\frac{0.8}{0.2}}$

$r_{pbi} = \frac{0.7}{3.43}\sqrt{4}$

$r = 0.187 \text{ x } 2 = 0.384$

Item 3 $r_{pbi} = = \frac{15.77 - 14.94}{3.74}\sqrt{\frac{0.7}{0.3}}$

$r_{pbi} = \frac{0.83}{3.74}\sqrt{2.33}$

$r = 0.221 \text{ x}1.5 \text{ } 2 = 0.335$

Item 4 $r_{pbi} = = \frac{15.72 - 14.94}{3.74}\sqrt{\frac{0.6}{0.4}}$

$r_{pbi} = \frac{1.42}{5.848}\sqrt{1.5}$

$r = 0.379 \text{ x } 1.22 = 0.462$

Item 5 $r_{pbi} = = \frac{15.60 - 14.94}{3.74}\sqrt{\frac{0.6}{0.4}}$

$r_{pbi} = \frac{0.66}{3.74}\sqrt{1.5}$

$r = 0.176 \text{ x } 1.22 = 0.214$

Item 6 $r_{pbi} = = \frac{15.72 - 14.94}{3.74}\sqrt{\frac{0.6}{0.4}}$

$r_{pbi} = \frac{0.78}{3.74}\sqrt{1.5}.5$

$r = 0.253 \text{ x } 1.22 = 0.253$

Item 7 $r_{pbi} = = \frac{16.12 - 14.94}{3.74}\sqrt{\frac{0.6}{0.4}}$

$r_{pbi} = \frac{1.18}{3.74}\sqrt{1.5}$

$r = 0.315 \text{ x } 1.22 = 0.384$

Item 8 $r_{pbi} = = \frac{15.77 - 14.94}{3.74}\sqrt{\frac{0.7}{0.3}}$

$r_{pbi} = \frac{0.83}{3.74}\sqrt{2.33}$

$r = 0.221 \text{ x } 1.52 = 0.335$

Item 9 $r_{pbi} == \frac{16.27 - 14.94}{3.74} \sqrt{\frac{0.6}{0.4}}$

$\quad r_{pbi} = \frac{1.33}{3.74} \sqrt{1.5}$

$\quad r = 0.355 \text{ x } 1.22 = 0.433$

Item 10 $r_{pbi} == \frac{16.04 - 14.94}{3.74} \sqrt{\frac{0.6}{0.4}}$

$\quad r_{pbi} = \frac{1.1}{3.74} \sqrt{1.5}$

$\quad r = 0.294 \text{x } 1.22 = 0.358$

Item 11 $r_{pbi} == \frac{15.34 - 14.94}{3.74} \sqrt{\frac{0.6}{0.4}}$

$\quad r_{pbi} = \frac{0.4}{3.74} \sqrt{1.5}$

$\quad r = 0.106 \text{ x } 1.22 = 0.129$

Item 12 $r_{pbi} == \frac{16.30 - 14.94}{3.74} \sqrt{\frac{0.6}{0.4}}$

$\quad r_{pbi} = \frac{1.36}{5.848} \sqrt{1.5}$

$\quad r = 0.363 \text{ x } 1.22 = 0.442$

Item 13 $r_{pbi} == \frac{16.95 - 14.94}{3.74} \sqrt{\frac{0.5}{0.5}}$

$\quad r_{pbi} = \frac{2.01}{3.74} \sqrt{1}$

$\quad r = 0.537 \text{ x } 1 = 0.537$

Item 14 $r_{pbi} == \frac{15.16 - 14.94}{3.74} \sqrt{\frac{0.8}{0.2}}$

$\quad r_{pbi} = \frac{0.22}{3.74} \sqrt{4}$

$\quad r = 0.058 \text{ x } 2 = 0.116$

tem 15 $r_{pbi} == \frac{16.04 - 14.94}{3.74} \sqrt{\frac{0.6}{0.4}}$

$\quad r_{pbi} = \frac{1.1}{3.74} \sqrt{1.5}$

$\quad r = 0.294 \text{ x } 1.22 = 0.358$

Item 16 $r_{pbi} == \frac{16.50 - 14.94}{3.74} \sqrt{\frac{0.5}{0.5}}$

$\quad r_{pbi} = \frac{1.56}{3.74} \sqrt{1}$

$\quad r = 0.417 \text{ x } 1 = 0.417$

Item 17 $r_{pbi} == \frac{17.20 - 14.94}{3.74} \sqrt{\frac{0.4}{0.6}}$

$\quad r_{pbi} = \frac{2.26}{3.74} \sqrt{0.66}$

$\quad r = 0.604 \text{ x } 0.812 = 0.492$

Item 18 $r_{pbi} = = \frac{16.23 - 14.94}{3.74}\sqrt{\frac{0.4}{0.6}}$

$\qquad r_{pbi} = \frac{1.29}{3.74}\sqrt{0.66}$

$\qquad r = 0.344 \times 0.812 = 0.278$

Item 19 $r_{pbi} = = \frac{15.68 - 14.94}{3.74}\sqrt{\frac{0.8}{0.2}}$

$\qquad r_{pbi} = \frac{0.74}{3.74}\sqrt{4}$

$\qquad r = 0.197 \times 2 = 0.394$

Item 20 $r_{pbi} = = \frac{16.04 - 14.94}{3.74}\sqrt{\frac{0.6}{0.4}}$

$\qquad r_{pbi} = \frac{1.1}{3.74}\sqrt{0.66}$

$\qquad r = 0.294 \times 0.812 = 0.238$

Item 21 $r_{pbi} = = \frac{15.77 - 14.94}{3.74}\sqrt{\frac{0.7}{0.3}}$

$\qquad r_{pbi} = \frac{0.83}{3.74}\sqrt{2.33}$

$\qquad r = 0.221 \times 1.52 = 0.335$

Item 22 $r_{pbi} = = \frac{16.62 - 14.94}{3.74}\sqrt{\frac{0.4}{0.6}}$

$\qquad r_{pbi} = \frac{1.68}{3.74}\sqrt{0.66}$

$\qquad r = 0.449 \times 0.812 = 0.366$

Item 23 $r_{pbi} = = \frac{15.95 - 14.94}{3.74}\sqrt{\frac{0.6}{0.4}}$

$\qquad r_{pbi} = \frac{1.01}{3.74}\sqrt{0.66}$

$\qquad r = 0.270 \times 0.812 = 0.329$

Item 24 $r_{pbi} = \frac{16.04 - 14.94}{3.74}\sqrt{\frac{0.6}{0.4}}$

$\qquad r_{pbi} = \frac{1.1}{3.74}\sqrt{1.5}$

$\qquad r = 0.294 \times 1.22 = 0.358$

Item 25 $r_{pbi} = = \frac{16.26 - 14.94}{3.74}\sqrt{\frac{0.6}{0.4}}$

$\qquad r_{pbi} = \frac{1.32}{3.74}\sqrt{1.5}$

$\qquad r = 0.352 \times 1.22 = 0.429$

Appendix 9

Validity Post Test

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	xt	xt²
1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	1	1	0	0	1	1	1	20	400
2	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23	529
3	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	1	0	1	20	400
4	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0	1	1	1	0	1	1	0	19	361
5	0	1	0	0	0	1	0	1	0	1	1	1	1	1	1	0	0	1	0	1	1	1	0	1	0	14	196
6	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	0	1	1	1	0	1	1	1	20	400
7	1	1	0	0	0	0	1	1	1	0	0	1	0	1	1	0	1	1	1	1	1	0	1	0	1	15	225
8	1	1	0	1	0	0	1	1	0	0	0	1	1	0	1	1	1	0	1	1	1	1	1	0	1	16	256
9	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	0	1	0	1	1	1	1	0	1	1	19	361
10	1	1	1	1	1	0	1	0	1	0	0	1	0	1	1	0	1	0	1	1	1	0	0	1	1	16	256
11	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	0	1	1	19	361
12	0	1	1	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	1	1	1	1	0	1	1	12	144
13	1	1	1	0	1	1	1	0	0	0	0	1	0	1	1	0	1	0	1	1	1	1	0	1	1	16	256
14	0	1	0	0	1	1	0	0	0	0	0	0	1	1	0	0	1	0	1	1	1	0	0	0	0	9	81
15	1	1	0	1	1	1	0	1	0	1	0	1	0	1	0	1	0	0	1	1	0	0	1	1	0	14	196
16	0	1	0	1	1	1	1	0	0	1	1	0	1	1	0	1	0	0	1	0	1	0	0	0	0	12	144
17	0	0	1	1	1	0	1	0	1	0	0	1	0	1	1	0	0	0	1	0	1	0	0	1	0	11	121
18	1	0	1	1	0	1	0	0	1	0	1	1	0	1	1	0	0	1	1	0	1	0	1	0	1	14	196
19	1	1	0	0	0	0	1	0	0	1	1	1	1	0	0	1	0	1	1	0	1	0	1	0	1	13	169
20	1	0	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0	0	1	1	0	1	1	1	1	19	361
21	1	1	1	0	1	1	0	0	0	0	1	1	1	1	1	0	0	0	1	1	1	0	1	1	0	15	225

No																										X	X²
22	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	0	0	0	1	0	0	0	1	0	14	196
23	1	0	0	0	1	0	0	0	1	1	1	1	0	1	0	1	0	0	1	1	0	0	0	1	0	11	121
24	1	1	1	0	0	0	1	0	1	0	1	0	0	1	0	0	1	0	1	0	1	1	0	0	0	11	121
25	1	1	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0	1	9	81
26	1	1	0	1	0	1	0	0	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	1	0	14	196
27	1	0	1	0	0	0	0	1	0	1	1	1	0	0	0	1	1	1	1	1	1	0	0	1	1	14	196
28	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	1	0	1	0	1	0	0	13	169
29	1	1	0	1	1	1	0	0	0	1	1	0	1	1	1	0	0	1	0	0	0	1	1	0	1	14	196
30	0	1	0	0	1	1	1	0	0	1	1	0	1	0	0	0	1	1	1	1	0	1	1	0	1	14	196
31	1	1	1	1	1	1	0	0	1	1	1	0	1	1	0	1	0	0	1	0	1	0	1	0	1	16	256
32	1	1	1	1	0	1	0	0	0	1	1	0	1	1	0	1	0	1	1	0	1	0	0	0	1	14	196
33	1	1	1	1	0	0	1	0	0	0	1	0	0	1	0	0	0	1	1	0	1	0	1	0	0	11	121
34	0	0	1	0	0	0	1	0	1	1	0	0	0	1	0	0	0	1	1	0	1	1	1	1	1	12	144
35	1	1	1	1	0	0	1	1	1	0	1	0	1	1	1	0	1	0	1	1	0	1	1	0	0	16	256
36	0	0	1	0	1	0	1	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	1	9	81
37	0	0	0	1	1	1	0	0	1	0	1	1	0	0	1	0	0	1	0	1	0	1	1	0	0	11	121
38	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1	22	484
39	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1	1	22	484
N=39	30	31	27	25	23	22	24	16	22	22	23	26	21	30	23	18	15	17	32	24	27	16	22	23	23	583	9253
p	0,8	0,8	0,7	0,6	0,6	0,6	0,6	0,4	0,6	0,6	0,6	0,6	0,5	0.8	0,6	0,5	0,4	0,4	0,8	0,6	0,7	0,4	0,6	0,6	0,6	∑xt	∑xt²
q	0,2	0,2	0,3	0,4	0,4	0,4	0,4	0,6	0,4	0,4	0,4	0,4	0,5	0,2	0,4	0,5	0,6	0,6	0,2	0,4	0,3	0,6	0,4	0,4	0,4		
Mp	15,96	15.6	15.77	16,36	15,60	15,72	16,12	15,77	16,27	16,04	15,34	16,30	16,95	15,16	16,04	16,50	17,20	16,23	15,68	16,04	15,77	16,62	15,95	16,04	16,26		
Rpbi	0,544	0,384	0,335	0,462	0,214	0,253	0,384	0,335	0,433	0,358	0,129	0,442	0,537	0,116	0,358	0,417	0,492	0,278	0,394	0,446	0,335	0,366	0,329	0,358	0,352		
	Valid	Valid	Valid	Valid	invalid	invalid	Valid	Valid	Valid	Valid	invalid	Valid	Valid	invalid	Valid	Valid	Valid	invalid	Valid	Valid	Valid	Valid	Valid	Valid	Valid		

Appendix 10

Table 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.	15.96	14.94	3.74	0.8	0.2	0.544	0.325	Valid
2.	15.64	14.94	3.74	0.8	0.2	0.384	0.325	Valid
3.	15.77	14.94	3.74	0.7	0.3	0.335	0.325	Valid
4.	16.36	14.94	3.74	0.6	0.4	0.462	0.325	Valid
5.	15.60	14.94	3.74	0.6	0.4	0.214	0.325	Invalid
6.	15.72	14.94	3.74	0.6	0.4	0.253	0.325	Invalid
7.	16.12	14.94	3.74	0.6	0.4	0.384	0.325	Valid
8.	15.77	14.94	3.74	0.4	0.6	0.335	0.325	Valid
9.	16.27	14.94	3.74	0.6	0.4	0.433	0.325	Valid
10.	16.04	14.94	3.74	0.6	0.4	0.358	0.325	Valid
11.	15.34	14.94	3.74	0.6	0.4	0.129	0.325	Invalid
12.	16.30	14.94	3.74	0.6	0.4	0.442	0.325	Valid
13.	16.95	14.94	3.74	0.5	0.5	0.537	0.325	Valid
14.	15.16	14.94	3.74	0.8	0.2	0.116	0.325	Invalid
15.	16.04	14.94	3.74	0.6	0.4	0.358	0.325	Valid
16.	16.50	14.94	3.74	0.5	0.5	0.417	0.325	Valid
17.	17.20	14.94	3.74	0.4	0.6	0.492	0.325	Valid
18.	16.23	14.94	3.74	0.4	0.6	0.278	0.325	Invalid
19.	15.68	14.94	3.74	0.8	0.2	0.394	0.325	Valid
20.	16.04	14.94	3.74	0.6	0.4	0.446	0.325	Valid
21.	15.77	14.94	3.74	0.7	0.3	0.335	0.325	Valid
22.	16.62	14.94	3.74	0.4	0.6	0.366	0.325	Valid
23.	15.95	14.94	3.74	0.6	0.4	0.329	0.325	Valid
24.	16.04	14.94	3.74	0.6	0.4	0.358	0.325	Valid
25.	16.26	14.94	3.74	0.6	0.4	0.352	0.325	Valid

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

    1. Means Score from Score Total (M_t)

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

$$M_t = \frac{583}{39} = 14.94$$

    2. Standard Deviation (SD_t)

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

$$SD_t = \sqrt{\frac{9253}{39} - \left(\frac{583}{39}\right)^2}$$

$$SD_t = \sqrt{237.256 - 14.96^2}$$

$$SD_t = \sqrt{237.256 - 223.203} = \sqrt{14.05} = 3.74$$

    3. Means Score (M_p)

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

$$M_{p1} = \frac{\begin{array}{c}20+23+20+19+20+15+16+19+16+19+16+14+14+1319\\ +15+14+11+11+9+14+14+13+14+16+14+11+16+22+22\end{array}}{30}$$

$$M_{p1} = \frac{479}{30} = 15.96$$

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

$$M_{p2} = \frac{\begin{array}{c}20+23+20+19+14+20+15+16+19+16+19+12+16+9+14+12\\ +13+15+14+11+9+14+13+14+14+16+14+11+16+22+22\end{array}}{31}$$

$$M_{p2} = \frac{485}{31} = 15.64$$

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

$$M_{p3} = \frac{\begin{array}{c}20+23+20+19+20+19+16+19+12+16+11+14+19+15+14+11+9\\ +14+13+16+14+1112+16+9+22+22\end{array}}{27}$$

$$M_{p3} = \frac{426}{27} = 15.77$$

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

$$M_{p4} = \frac{\begin{array}{c}20+23+20+19+20+16+19+16+19+14+12+11+14+19\\ +14+13+1416+14+11+16+11+22+22\end{array}}{25}$$

$$M_{p4} = \frac{409}{25} = 16.36$$

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

$$M_{p5} = \frac{\substack{20+23+20+19+20+16+12+16+9+14+12+11+19+15+14+11 \\ +14+14+16+9+11+22+22}}{23}$$

$$M_{p5} = \frac{259}{23} = 15.60$$

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

$$M_{p6} = \frac{\substack{20+19+14+20+19+19+16+9+14+12+14+19 \\ +15+9+14+14+14+16+14+11+22+22}}{22} = \frac{346}{22} = 15.72$$

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

$$M_{p7} = \frac{\substack{20+23+20+19+20+15+16+19+16+19+12+16+12 \\ +11+13+19+11+14+11+12+16+9+22+22}}{24} = \frac{387}{24} = 16.12$$

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

$$M_{p8} = \frac{20+23+20+19+14+20+15+16+19+19+14+14+13+16+22+22}{16}$$

$$M_{p8} = \frac{286}{16} = 17.87$$

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

$$M_{p9} = \frac{20+23+20+19+20+15+19+16+19+11+14+19+11+11+13+16+12+16+9+11+22+22}{22}$$

$$M_{p9} = \frac{358}{22} = 16.27$$

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

$$M_{p10} = \frac{20+23+20+19+14+19+14+12+13+19+14+11+14+14+13+14+14+16+14+12+22+22}{22}$$

$$M_{p10} = \frac{353}{22} = 16.04$$

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

$$M_{p11} = \frac{\substack{14+12+14+13+19+15+14+11+11+9+14+14+13+14+14 \\ +16+14+11+16+9+11+22+22}}{23}$$

$$M_{p11} = \frac{322}{23} = 15.34$$

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

$$M_{p12} = \frac{\substack{20+23+20+19+14+20+15+16+19+16+19+16+14+1114+13+19+15 \\ +14+11+14+13+14+11+22+22}}{26}$$

$$M_{p12} = \frac{424}{26} = 16.\,30$$

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

$$M_{p13} = \frac{20+23+20+19+14+20+16+19+9+12+13+19+15+14+14+16+14+16+22+22}{21}$$

$$M_{p13} = \frac{356}{21} = 16.95$$

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

$$M_{p9} = \frac{\begin{array}{c}20+23+20+19+14+20+15+19+16+19+12+16+9\\+14+12+11+14+19+15+14+11+11+9+14+14+16+14+11+12+16\end{array}}{30} = \frac{455}{30} = 15.16$$

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

$$M_{p15} = \frac{\begin{array}{c}20+23+20+19+14+20+15+16+19+16+19+12+16+11+14+15\\+14+114+16+9+11+22+22\end{array}}{23}$$

$$M_{p15} = \frac{369}{23} = 16.04$$

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

$$Mp_{16} = \frac{20+23+20+16+14+12+12+13+19+14+11+14+14+13+16+14+9+22+22}{18}$$

$$M_{p16} = \frac{286}{18} = 15.88$$

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

$$M_{p17} = \frac{23+20+20+15+16+19+16+19+16+9+11+14+16+22+22}{15}$$

$$M_{p17} = \frac{258}{15} = 17.20$$

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

$$M_{p18} = \frac{23+20+14+15+14+13+9+14+14+14+14+14+11+12+11+22+22}{17}$$

$$M_{p18} = \frac{276}{17} = 16.23$$

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

$$M_{p19} = \frac{\begin{array}{c}20+23+19+20+15+16+19+16+19+12+16+9+14+12+11+14\\+13+19+15+11+11+14+14+13+14=16+1411+12+16+22+22\end{array}}{32}$$

$$M_{p19} = \frac{502}{32} = 15.68$$

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

$$M_{p20} = \frac{\begin{array}{c}20+23+19+14+20+15+16+19+16+19+12+16+9+14+19+15+14\\+11+14+14+13+14+16+11\end{array}}{24}$$

$$M_{p20} = \frac{385}{24} = 16.04$$

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

$$M_{p21} = \frac{\begin{array}{c}23+19+1+20+15+16+19+16+19+12+16+9+12+11+14\\+13+15+11+14+14+13+14+16+14+11+12+22+2\end{array}}{27}$$

$$M_{p21} = \frac{426}{27} = 15.77$$

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

$$M_{p22} = \frac{23+20+14+16+9+12+16+19+11+9+14+12+16+11+22+22}{16}$$

$$M_{p22} = \frac{256}{16} = 16.62$$

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

$$M_{p23} = \frac{20+23+20+19+20+15+16+14+14+13+19+15+14+13+14+14+16+11+12+11+22}{22}$$

$$M_{p23} = \frac{351}{22} = 15.95$$

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

$$M_{p24} = \frac{\begin{array}{c}20+23+19+14+20+19+16+19+12+16+14+11+19+15+14\\+11+14+14++14+12+9+22+22\end{array}}{23}$$

$$M_{p24} = \frac{369}{23} = 16.04$$

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

$$M_{p25} = \frac{\begin{array}{c}20+23+20+20+15+16+19+16+19+12+16+14+13+19+9+14+14\\+16+14+12+9+22+22\end{array}}{23}$$

$$M_{p25} = \frac{374}{23} = 16.26$$

4. Calculation of the Formulation $r_{pbi} = \frac{M_{p} - M_{t}}{SD_{t}} \sqrt{\frac{p}{q}}$

Item 1 = $r_{pbi} = \frac{M_{p} - M_{t}}{SD_{t}} \sqrt{\frac{p}{q}}$

$r_{pbi} = \frac{15.96 - 14.94}{3.74} \sqrt{\frac{0.8}{0.2}}$

$r = \frac{1.02}{5.848} \sqrt{4}$

$r = 0.272 \times 2 = 0.544$

Item 2 $r_{pbi} = \frac{15.64 - 14.94}{3.74} \sqrt{\frac{0.8}{0.2}}$

$r_{pbi} = \frac{0.7}{3.43} \sqrt{4}$

$r = 0.187 \times 2 = 0.384$

Item 3 $r_{pbi} = = \frac{15.77 - 14.94}{3.74} \sqrt{\frac{0.7}{0.3}}$

$r_{pbi} = \frac{0.83}{3.74} \sqrt{2.33}$

$r = 0.221 \times 1.5 \ 2 = 0.335$

Item 4 $r_{pbi} = = \frac{15.72 - 14.94}{3.74} \sqrt{\frac{0.6}{0.4}}$

$r_{pbi} = \frac{1.42}{5.848} \sqrt{1.5}$

$r = 0.379 \times 1.22 = 0.462$

Item 5 $r_{pbi} = = \frac{15.60 - 14.94}{3.74} \sqrt{\frac{0.6}{0.4}}$

$r_{pbi} = \frac{0.66}{3.74} \sqrt{1.5}$

$r = 0.176 \times 1.22 = 0.214$

Item 6 $r_{pbi} = = \frac{15.72 - 14.94}{3.74} \sqrt{\frac{0.6}{0.4}}$

$r_{pbi} = \frac{0.78}{3.74} \sqrt{1.5}.5$

$r = 0.253 \times 1.22 = 0.253$

Item 7 $r_{pbi} = = \frac{16.12 - 14.94}{3.74} \sqrt{\frac{0.6}{0.4}}$

$r_{pbi} = \frac{1.18}{3.74} \sqrt{1.5}$

$r = 0.315 \times 1.22 = 0.384$

Item 8 $r_{pbi} = = \frac{15.77 - 14.94}{3.74} \sqrt{\frac{0.7}{0.3}}$

$r_{pbi} = \frac{0.83}{3.74} \sqrt{2.33}$

$r = 0.221 \times 1.52 = 0.335$

Item 9 $r_{pbi} = = \dfrac{16.27 - 14.94}{3.74} \sqrt{\dfrac{0.6}{0.4}}$

$r_{pbi} = \dfrac{1.33}{3.74} \sqrt{1.5}$

r = 0.355 x 1.22 = 0.433

Item 10 $r_{pbi} = = \dfrac{16.04 - 14.94}{3.74} \sqrt{\dfrac{0.6}{0.4}}$

$r_{pbi} = \dfrac{1.1}{3.74} \sqrt{1.5}$

r = 0.294x 1.22= 0.358

Item 11 $r_{pbi} = = \dfrac{15.34 - 14.94}{3.74} \sqrt{\dfrac{0.6}{0.4}}$

$r_{pbi} = \dfrac{0.4}{3.74} \sqrt{1.5}$

r = 0.106 x 1.22 = 0.129

Item 12 $r_{pbi} = = \dfrac{16.30 - 14.94}{3.74} \sqrt{\dfrac{0.6}{0.4}}$

$r_{pbi} = \dfrac{1.36}{5.848} \sqrt{1.5}$

r = 0.363 x 1.22 = 0.442

Item 13 $r_{pbi} = = \dfrac{16.95 - 14.94}{3.74} \sqrt{\dfrac{0.5}{0.5}}$

$r_{pbi} = \dfrac{2.01}{3.74} \sqrt{1}$

r = 0.537 x 1 = 0.537

Item 14 $r_{pbi} = = \dfrac{15.16 - 14.94}{3.74} \sqrt{\dfrac{0.8}{0.2}}$

$r_{pbi} = \dfrac{0.22}{3.74} \sqrt{4}$

r = 0.058 x 2 = 0.116

tem 15 $r_{pbi} = = \dfrac{16.04 - 14.94}{3.74} \sqrt{\dfrac{0.6}{0.4}}$

$r_{pbi} = \dfrac{1.1}{3.74} \sqrt{1.5}$

r = 0.294 x 1.22 = 0.358

Item 16 $r_{pbi} = = \dfrac{16.50 - 14.94}{3.74} \sqrt{\dfrac{0.5}{0.5}}$

$r_{pbi} = \dfrac{1.56}{3.74} \sqrt{1}$

r = 0.417 x 1 = 0.417

Item 17 $r_{pbi} = = \dfrac{17.20 - 14.94}{3.74} \sqrt{\dfrac{0.4}{0.6}}$

$r_{pbi} = \dfrac{2.26}{3.74} \sqrt{0.66}$

r = 0.604 x 0.812 = 0.492

Item 18 $r_{pbi} = = \dfrac{16.23 - 14.94}{3.74} \sqrt{\dfrac{0.4}{0.6}}$

$\quad r_{pbi} = \dfrac{1.29}{3.74} \sqrt{0.66}$

$\quad r = 0.344 \text{ x } 0.812 = 0.278$

Item 19 $r_{pbi} = = \dfrac{15.68 - 14.94}{3.74} \sqrt{\dfrac{0.8}{0.2}}$

$\quad r_{pbi} = \dfrac{0.74}{3.74} \sqrt{4}$

$\quad r = 0.197 \text{ x } 2 = 0.394$

Item 20 $r_{pbi} = = \dfrac{16.04 - 14.94}{3.74} \sqrt{\dfrac{0.6}{0.4}}$

$\quad r_{pbi} = \dfrac{1.1}{3.74} \sqrt{0.66}$

$\quad r = 0.294 \text{ x } 0.812 = 0.238$

Item 21 $r_{pbi} = = \dfrac{15.77 - 14.94}{3.74} \sqrt{\dfrac{0.7}{0.3}}$

$\quad r_{pbi} = \dfrac{0.83}{3.74} \sqrt{2.33}$

$\quad r = 0.221 \text{ x } 1.52 = 0.335$

Item 22 $r_{pbi} = = \dfrac{16.62 - 14.94}{3.74} \sqrt{\dfrac{0.4}{0.6}}$

$\quad r_{pbi} = \dfrac{1.68}{3.74} \sqrt{0.66}$

$\quad r = 0.449 \text{ x } 0.812 = 0.366$

Item 23 $r_{pbi} = = \dfrac{15.95 - 14.94}{3.74} \sqrt{\dfrac{0.6}{0.4}}$

$\quad r_{pbi} = \dfrac{1.01}{3.74} \sqrt{0.66}$

$\quad r = 0.270 \text{ x } 0.812 = 0.329$

Item 24 $r_{pbi} = \dfrac{16.04 - 14.94}{3.74} \sqrt{\dfrac{0.6}{0.4}}$

$\quad r_{pbi} = \dfrac{1.1}{3.74} \sqrt{1.5}$

$\quad r = 0.294 \text{ x } 1.22 = 0.358$

Item 25 $r_{pbi} = = \dfrac{16.26 - 14.94}{3.74} \sqrt{\dfrac{0.6}{0.4}}$

$\quad r_{pbi} = \dfrac{1.32}{3.74} \sqrt{1.5}$

$\quad r = 0.352 \text{ x } 1.22 = 0.429$

Reliability Pre Test

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	Xt	Xt²
1	1	0	1	1	0	1	0	1	1	0	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	18	324
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	22	484
3	1	1	1	1	0	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	20	400
4	1	1	1	0	1	0	0	1	0	1	0	1	0	1	0	1	1	0	1	0	1	1	1	1	1	16	256
5	1	1	0	1	1	0	1	1	0	1	0	0	0	1	1	1	0	0	1	0	1	0	1	0	1	14	196
6	1	1	1	1	1	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	1	1	0	1	13	169
7	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	0	1	1	12	144
8	0	0	0	1	0	0	1	1	1	0	0	0	1	0	1	0	0	0	1	0	1	1	1	0	1	11	121
9	0	1	1	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	1	1	10	100
10	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	1	1	0	1	1	1	1	0	19	361
11	1	1	0	1	0	1	1	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	1	0	13	169
12	0	1	1	1	1	0	1	1	0	1	1	1	0	0	1	0	0	1	1	0	1	0	1	0	0	14	196
13	0	1	0	1	1	1	0	1	0	0	1	1	1	0	0	0	1	1	0	0	1	0	1	0	1	13	169
14	1	1	0	1	0	0	0	1	1	0	1	1	0	1	1	1	0	0	1	0	1	1	0	0	0	13	169
15	1	1	0	1	1	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	0	13	169
16	0	1	1	1	0	1	0	1	0	0	0	1	1	0	1	0	0	0	1	0	0	1	0	0	0	10	100
17	1	1	1	1	1	0	0	0	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1	0	0	17	289
18	0	0	1	1	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	1	0	0	0	0	9	81
19	1	1	1	0	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	11	121
20	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	0	0	0	0	1	1	0	0	0	0	14	196
21	1	0	1	1	1	0	1	1	1	1	1	1	0	1	0	0	0	1	0	1	1	1	1	1	1	18	324

																										xt	xt²
22	1	1	0	0	1	0	1	1	0	1	0	1	0	0	1	0	0	0	1	0	1	1	0	0	0	12	144
23	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0	0	1	0	0	1	1	0	0	0	16	256
24	1	0	1	1	1	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	9	81
25	1	1	0	0	1	1	0	0	1	1	1	0	1	0	0	1	1	0	1	1	1	1	1	0	1	15	225
26	1	1	1	1	0	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	20	400
27	1	1	1	0	1	0	0	1	1	0	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	15	225
28	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	18	324
29	1	0	1	1	0	0	0	1	1	0	1	0	1	1	1	0	1	0	0	0	0	0	1	1	1	13	169
30	1	1	0	0	1	1	0	0	0	0	1	1	1	0	1	0	0	1	1	0	1	0	1	0	0	13	169
31	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0	20	400
32	0	0	0	1	0	0	0	1	1	1	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1	11	121
33	1	0	1	0	1	1	0	0	1	0	0	1	0	1	0	0	0	1	0	1	1	1	1	1	0	13	169
34	1	0	0	0	1	1	1	1	0	1	0	1	0	0	1	0	0	0	1	1	1	0	1	1	0	13	169
35	1	0	0	0	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	1	0	1	1	0	0	13	169
36	1	0	1	1	0	0	1	1	1	0	0	1	0	1	1	1	0	0	0	1	0	1	1	1	1	14	196
37	0	0	1	1	1	0	1	0	0	1	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	9	81
38	1	0	0	1	1	1	1	0	1	0	1	1	0	0	1	1	0	0	1	0	0	1	0	0	0	11	121
39	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	1	1	1	0	1	20	400
N=39	30	26	26	30	25	21	18	27	18	22	22	30	21	21	24	26	13	16	22	17	32	23	26	15	18	555	8357
p	0,76	0,66	0,66	0,76	0,64	0,46	0,53	0,69	0,46	0,56	0,56	0,76	0,53	0,53	0,61	0,66	0,30	0,41	0,56	0,43	0,82	0,58	0,33	0,38	0,46	∑xt	∑xt²
q	0,23	0,33	0,33	0,23	0,35	0,53	0,46	0,30	0,53	0,43	0,43	0,23	0,46	0,46	0,38	0,33	0,69	0,58	0,43	0,56	0,17	0,43	0,66	0,61	0,53		
p.q	0,1748	0,2178	0,2178	0,1748	0,224	0,2438	0,2438	0,207	0,2438	0,2408	0,2408	0,1748	0,2438	0,2438	0,2318	0,2178	0,207	0,2378	0,2408	0,2408	0,1394	0,2378	0,2178	0,2318	0,2438	4.599	∑pq

Appendix 13

Reliability Pre Test

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

N= 25

$\Sigma Xt = 555$

$\Sigma Xt^2 = 8357$

$\Sigma pq = 4.599$

$$S_t^2 = \Sigma Xt^2 - \left(\frac{\Sigma xt}{N}\right)^2$$

$$= 8357 - \left(\frac{555}{39}\right)^2 = 8357 - \frac{308025}{39} = 8375 - 7898.07 = 1258.93$$

$$S_t^2 = \frac{\Sigma Xt2}{N} = \frac{1258.93}{39}$$

$$S_t^2 = 32.2802$$

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

$$R_{11} = \left(\frac{25}{25-1}\right)\left(\frac{32.2802-4.599}{32.2802}\right) = \left(\frac{25}{24}\right)\left(\frac{27.6812}{32.2802}\right)$$

$$= (1.04166666)(0.857528763)$$

$$= 0.89 \ (r_{11} > 0.70 = reliable)$$

Appendix 14

Table Reliability Post Test

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	xt	xt²
1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	1	1	0	0	1	1	1	20	400
2	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23	529
3	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	1	0	1	20	400
4	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0	1	1	1	0	1	1	0	19	361
5	0	1	0	0	0	1	0	1	0	1	1	1	1	1	1	0	0	1	0	1	1	1	0	1	0	14	196
6	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	0	1	1	1	0	1	1	1	20	400
7	1	1	0	0	0	0	1	1	1	0	0	1	0	1	1	0	1	1	1	1	1	0	1	0	1	15	225
8	1	1	0	1	0	0	1	1	0	0	0	1	1	0	1	1	1	0	1	1	1	1	1	0	1	16	256
9	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	0	1	0	1	1	1	1	0	1	1	19	361
10	1	1	1	1	1	0	1	0	1	0	0	1	0	1	1	0	1	0	1	1	1	0	0	1	1	16	256
11	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	0	1	0	1	1	1	0	0	1	1	19	361
12	0	1	1	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	1	1	1	1	0	1	1	12	144
13	1	1	1	0	1	1	1	0	0	0	0	1	0	1	1	0	1	0	1	1	1	1	0	1	1	16	256
14	0	1	0	0	1	1	0	0	0	0	0	0	1	1	0	0	1	0	1	1	1	0	0	0	0	9	81
15	1	1	0	1	1	1	0	1	0	1	0	1	0	1	0	1	0	0	1	1	0	0	1	1	0	14	196
16	0	1	0	1	1	1	1	0	0	1	1	0	1	1	0	1	0	0	1	0	1	0	0	0	0	12	144
17	0	0	1	1	1	0	1	0	1	0	0	1	0	1	1	0	0	0	1	0	1	0	0	1	0	11	121
18	1	0	1	1	0	1	0	0	1	0	1	1	0	1	1	0	0	1	1	0	1	0	1	0	1	14	196
19	1	1	0	0	0	0	1	0	0	1	1	1	1	0	0	1	0	1	1	0	1	0	1	0	1	13	169
20	1	0	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0	0	1	1	0	1	1	1	1	19	361
21	1	1	1	0	1	1	0	0	0	0	1	1	1	1	1	0	0	0	1	1	1	0	1	1	0	15	225

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	∑xt	∑xt²
22	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	0	0	0	1	0	0	0	1	0	14	196
23	1	0	0	0	1	0	0	0	1	1	1	1	0	1	0	1	0	0	1	1	0	0	0	1	0	11	121
24	1	1	1	0	0	0	1	0	1	0	1	0	0	1	0	0	1	0	1	0	1	1	0	0	0	11	121
25	1	1	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	0	1	9	81
26	1	1	0	1	0	1	0	0	0	1	1	0	0	0	1	1	0	1	1	1	1	0	1	1	0	14	196
27	1	0	1	0	0	0	0	1	0	1	1	1	0	0	0	1	1	1	1	1	1	0	0	1	1	14	196
28	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	1	0	1	0	1	0	0	13	169
29	1	1	0	1	1	1	0	0	0	1	1	0	1	1	1	0	0	1	0	0	0	1	1	0	1	14	196
30	0	1	0	0	1	1	1	0	0	1	1	1	0	1	0	0	0	1	1	1	1	0	1	1	0	14	196
31	1	1	1	1	1	1	0	0	1	1	1	0	1	1	0	1	0	0	1	0	1	0	1	0	1	16	256
32	1	1	1	1	0	1	0	0	0	1	1	0	1	1	0	1	0	1	1	0	1	0	0	0	1	14	196
33	1	1	1	1	0	0	1	0	0	0	1	0	0	1	0	0	0	1	1	0	1	0	1	0	0	11	121
34	0	0	1	0	0	0	1	0	1	1	0	0	0	1	0	0	0	1	1	0	1	1	1	1	1	12	144
35	1	1	1	1	0	0	1	1	1	0	1	0	1	1	1	0	1	0	1	1	0	1	1	0	0	16	256
36	0	0	1	0	1	0	1	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	1	9	81
37	0	0	0	1	1	1	0	0	1	0	1	1	0	0	1	0	0	1	0	1	0	1	1	0	0	11	121
38	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1	22	484
39	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1	1	22	484
N=39	30	31	27	25	23	22	24	16	22	22	23	26	21	30	23	18	15	17	32	24	27	16	22	23	23	583	9253
p	0,76	0,79	0,69	0,64	0,58	0,56	0,61	0,41	0,56	0,56	0,58	0,66	0,53	0,76	0,58	0,46	0,38	0,43	0,82	0,61	0,69	0,41	0,56	0,58	0,58	∑xt	∑xt²
q	0,23	0,20	0,30	0,35	0,41	0,43	0,38	0,58	0,43	0,43	0,43	0,33	0,46	0,23	0,41	0,53	0,61	0,56	0,17	0,38	0,30	0,58	0,43	0,43	0,43		
pq	0,1748	0,158	0,207	0,224	0,2378	0,2408	0,2318	0,2378	0,2408	0,2408	0,2378	0,2178	0,2438	0,1748	0,2378	0,2438	0,2318	0,2408	0,1394	0,2318	0,207	0,2378	0,2408	0,2378	0,2378	4.5122	∑pq

Appendix 15

Reliability Post Test

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

N= 25

$\sum Xt = 583$

$\sum Xt^2 = 9253$

$\sum pq = 5.554$

$$S_t^2 = \sum Xt^2 - \left(\frac{\sum xt}{N}\right)^2$$

$$= 9253 - \left(\frac{583}{39}\right)^2 = 9253 - \frac{339889}{39} = 9253 - 8715.10 = 537.90$$

$$S_t^2 = \frac{\sum Xt2}{N} = \frac{537.90}{39}$$

$$S_t^2 = 13.7923$$

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

$$R_{11} = \left(\frac{25}{25-1}\right)\left(\frac{13.7923 - 4.512}{13.7923}\right) = \left(\frac{25}{24}\right)\left(\frac{9.2803}{13.7923}\right)$$

$$= (1.04166666)(0.672860594)$$

$$= 0.71 \ (r_{11} > 0.70 = \text{reliable})$$

Appendix 16

Score of Experimental Class and Control Class Pre Test

1. Score of Experimental Class Pre Test before using P2R (Preview, Read, Review) Strategy

The Initial Name of Students (n)	Pre-Test	The Initial Name of Students (n)	Pre-Test
1. Abdullah Amsari	60	21. Maulida Fitriani	55
2. Ade Andriyani	55	22. Mery Ayu Lita	45
3. Adelia Rosa	50	23. Miska Hayani	45
4. Ahmad Kasmir	50	24. M. Karim	50
5. Aman Sahran	55	25. Nelli Agustina	60
6. Anggi Nauli	55	26. Nur Asiah	60
7. Anhar Perdana	45	27. Nur Mahrani	50
8. Annisa Fitri	55	28. Nur Walimah	55
9. Annisa rani	40	29. Putri indah Amalia	60
10. Asmidar	35	30. Riski Marito	40
11. Azizah Putri Syafa	55	31. Sakinah	65
12. Cindy Lestary	60	32. Shoifuddin Sholeh	55
13. Desi Rahma Yanti	60	33. Siti Anggraeni	65
14. Dinda Tia Padani	55	34. Siti Arofah	55
15. Fenny Ade Annisah	65	35. Siti Wahyuni	45
16. Kessy Lanawa	65	36. Yeni Pratiwi	55
17. Khoirul Yahya	65	37. Yuyun Saragi	55
18. lia Fitriani	50		
19. Laili Syafarindah	35		
20. Iis Harisandy	40		
Total		1965	

2. Score of Control Class Pre Test

The Initial Name of Students (n)	Pre-Test	The Initial Name of Students (n)	Pre-Test
1. Ainun Setia Ningsih	55	21. Nur Fadilah Hrp	65
2. Andriansyah	65	22. Nur Sakinah	50
3. Anni Fazirah	60	23. Pebrina Fitriyani	65
4. Annisa Putri	55	24. Putri Derlina	55
5. Ayu Andira	55	25. Putri Maya Sari	50
6. Fitriani Hafizah	40	26. Potan Syahmuda	45
7. Fitriya Hairani	55	27. Rahma yani	60
8. Hendika Halomoan	60	28. Rizky Alwi	35
9. Hesna Hasmia	60	29. Saida Amelia	45
10. Hiyasni Ayu	55	30. Sukma Ayu Lestari	60
11. Husnatul Hidayah	60	31. Syahida Sholih	45
12. Ilham Arya Siddiq	35	32. Tanti Rahmayani	55
13. Indri Wahyuni Rahayu	50	33. Tomy Irawan	40
14. Khoirunnisa	50	34. Usna varianti	50
15. Lusi Anggiani	40	35. Wan Apriyanti	65
16. Mentari Ramadhani	60	36. Yayang Widya	60
17. Mia Yudina Yanti	55	37. Yusril Rahwan	50
18. M. Abdul Rozak	55		
19. M. Abdul Sholih	40		
20. Nur Fadilah Asri	65		
Total		1965	

Appendix 17

RESULT OF THE NORMALITY TEST OF VIII-1 IN PRE-TEST

1. The score of VIII-1 class in pre test from low score to high score:

   35 35 40 40 40 45 45 45 45 50

   50 50 50 50 55 55 55 55 55 55

   55 55 55 55 55 55 60 60 60 60

   60 60 65 65 65 65 65

2. High   = 65

   Low   = 35

   Range   = High − Low

             = 65 − 35
             = 30

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

                  = 1 + 3,3 log (37)

                  = 1 + 3,3 (1,56)

                  = 1 + 5.14

                  = 6.14

                  = 6

4. Length of Classes $= \dfrac{range}{total\ of\ class}$ $= \dfrac{30}{6} = 5$

5. Mean

Interval Class	F	X	x	fx	x^2	fx^2
35 - 39	2	37	4	8	16	32
40 - 44	3	42	3	9	9	27
45 - 49	4	47	2	8	4	16
50 - 54	5	52	1	10	1	5
55 - 59	12	57	0	0	0	0
60 - 64	6	62	-1	-6	1	6
65 - 69	5	67	-2	-10	4	20
$i = 5$	37	-	-	19	-	106

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

$$= 57 + 5(\frac{19}{37})$$

$$= 57 + 5(0.51)$$
$$= 57 + (2.55)$$
$$= 59.55$$

$$\text{SD}_t \quad = i\sqrt{\frac{\Sigma fx'^2}{N} - \left[\frac{\Sigma fx'}{N}\right]^2}$$

$$= 5\sqrt{\frac{106}{37} - \left(\frac{19}{37}\right)^2}$$

$$= 5\sqrt{2.86 - (-0.51)^2}$$

$$= 5\sqrt{2.86 - 0.260}$$

$$= 5\sqrt{2.6}$$

$$= 5\,(1,61)$$

$$= 8.05$$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\dfrac{(f_0-f_h)}{f_h}$
	69.5	1.24	0.3925				
65 – 69				0.14	5.18	5	-0.03
	64.5	0.66	0.2454				
60 – 64				0.21	7.77	6	-0.02
	59.5	0.07	0.0279				
55 – 59				-0.28	-10.36	12	-2.15
	54.5	-0.50	0.30854				
50 – 54				0.17	6.29	5	-0.20
	49.5	-1.09	0.13786				
45– 49				0.09	3.33	4	0.20
	44.5	-1.67	0.04746				
40- 44				0.03	1.11	3	1.70
	39.5	-2.26	0.01222				
35 - 39				0.00	0	2	2.00
	34.5	-2.84	0.00226				
						X^2	1.30

Based on table above, reseracher found that $x^2_{count} = 1.30$ while $x^2_{table} = 5.991$ cause $x^2_{cause} < x^2_{table}$ (1.30 < 5.991) with degree of freedom dk = 5 − 3 = 2 and significat level $\alpha = 5\%$. So distribution of VIII-1 class (Pre-test) is normal.

6. Median

No	Interval of Classes	F	fk
1	35 - 39	2	2
2	40 - 44	3	5
3	45 - 49	4	9
4	50 - 54	5	14
5	55 - 59	12	26
6	60 - 64	6	32
7	65 - 69	5	37

Position of Me in the interval of classes is number 5, that:

Bb $\quad = 54.5$

F $\quad = 5$

fm $\quad = 12$

i $\quad = 5$

n $\quad = 37$

1/2n $\quad =18.5$

So :

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

$$= 54,5 + 6 \left(\frac{18.5-5}{12} \right)$$

$$= 54.5 + 6 \, (1.12)$$

$$= 54.5 + 6.72$$

$$= 61.22$$

7. Modus

No	Interval of Classes	F	fk
1	35 - 39	2	2
2	40 - 44	3	5
3	45 - 49	4	9
4	50 - 54	5	14
5	55 - 59	12	26
6	60 - 64	6	32
7	65 - 69	5	37

$$M_o = L + \frac{d_1}{d_1 + d_2} i$$

$L = 54.5$

$d_1 = 7$

$d_2 = 6$

$i = 5$

$M_o = 54.5 + \frac{7}{7+6} 5$

$\quad = 54.5 + 0.53 \ (5)$

$\quad = 54.5 + 2.65$

$\quad = 57.15$

RESULT OF THE NORMALITY TEST OF VIII-2 IN PRE-TEST

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

   35 35 40 40 40 40 45 45 45 50

   50 50 50 50 50 55 55 55 55 55

   55 55 55 55 60 60 60 60 60 60

   60   60 65 65 65 65 65

2. High   = 65

   Low   = 35

   Range   = High − Low

   $$= 65 - 35$$
   $$= 30$$

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

   $$= 1 + 3,3 \log (37)$$

   $$= 1 + 3,3 (1.56)$$

   $$= 1 + 5.148$$

   $$= 6.148$$

   $$= 6$$

4. Length of Classes $= \dfrac{range}{total\ of\ class}$ $= \dfrac{30}{6} = 5$

5. Mean

Interval Class	F	X	x'	fx'	x'^2	fx'^2
35 - 39	2	37	4	8	16	32
40 - 44	4	42	3	12	9	36
45 - 49	3	47	2	6	4	12
50 - 54	6	52	1	6	1	6
55 - 59	9	**57**	0	0	0	0
60 - 64	8	62	-1	-8	1	8
65 - 69	5	67	-2	-10	4	20
$i = 5$	37	-	-	14	-	114

$$Mx = M^1 + i \frac{\Sigma f x^1}{N}$$

$$= 57 + 5 \left(\frac{14}{37} \right)$$

$$= 57 + 5(0.37)$$

$$= 57 + 1.85$$

$$= 58.85$$

$$SD_t \quad = i \sqrt{\frac{\Sigma f x'^2}{N} - \left[\frac{\Sigma f x'}{N} \right]^2}$$

$$= 5 \sqrt{\frac{114}{37} - \left(\frac{14}{37} \right)^2}$$

$$= 5 \sqrt{3.08 - (0.37)^2}$$

$$= 5 \sqrt{3.08 - 0.13}$$

$$= 5 \sqrt{2.95}$$

$$= 5 \, (1.71)$$

$$= 8.55$$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\dfrac{(f_0-f_h)}{f_h}$
	69.5	1.24	0.3925				
65 – 69				0.14	5.18	5	-0.03
	64.5	0.66	0.2454				
60 – 64				0.21	7.77	8	0.02
	59.5	0.07	0.0279				
55 – 59				-0.28	-10.36	9	-1.86
	54.5	-0.50	0.30854				
50 – 54				0.17	6.29	6	-0.04
	49.5	-1.09	0.13786				
45– 49				0.09	3.33	3	-0.09
	44.5	-1.67	0.04746				
40- 44				0.03	1.11	4	2.60
	39.5	-2.26	0.01222				
35 - 39				0.00	0	2	2.00
	34.5	-2.84	0.00226				
						X^2	2.60

Based on table above, reseracher found that $x^2{}_{count} = 2.60$ while $x^2{}_{table} = 5.991$ cause $x^2{}_{cause} < x^2{}_{table}$ (2.60 < 5.991) with degree of freedom $dk = 5 - 3 = 2$ and significat level $\alpha = 5\%$. So distribution of VIII-2 class (Pre-test) is normal.

6. Median

No	Interval Class	F	fk
1	35 - 39	2	2
2	40 - 44	4	6
3	45 - 49	3	9
4	50 - 54	6	15
5	55 - 59	9	24
6	60 - 64	8	32
7	65 - 69	5	37
	$i = 5$	37	-

Position of Me in the interval of classes is number 5, that:

Bb $= 54.5$

F $= 6$

fm $= 9$

i $= 5$

n $= 37$

1/2n $= 18.5$

So :

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

$$= 54.5 + 5 \left(\frac{18.5 - 6}{9} \right)$$

$$= 54.5 + 5 \, (12{,}5/9)$$

$$= 54{,}5 + 5 \, (1.3)$$

$$= 54{,}5 + 6.5$$

$$= 61$$

7. Modus

No	Interval Class	F	fk
1	35 - 39	2	2
2	40 - 44	4	6
3	45 - 49	3	9
4	50 - 54	6	15
5	55 - 59	9	24
6	60 - 64	8	32
7	65 - 69	5	37
	$i = 5$	37	-

$$M_o = L + \frac{d_1}{d_1 + d_2} i$$

$L = 54.5$

$d_1 = 3$

$d_2 = 1$

$i = 5$

$M_o = 54.5 + \frac{3}{3+1} \, 5$

$\quad\;\; = 54.5 + 0.75 \,(5)$

$\quad\;\; = 54.5 + 3.75$

$\quad\;\; = 58.25$

1. The score of VII 3 class in pre test from low score to high score:

   35 35 40 40 40 45 45 45 50 50

   50 55 55 55 55 55 55 55 55 55

   55 55 55 55 55 55 60 60 60 60

   60 60 60 65 65 65 70

2. High $= 70$

   Low $= 35$

   Range $= $ High $-$ Low

   $= 70 - 35$

   $= 35$

3. Total of Classes $= 1 + 3,3 \log (n)$

   $= 1 + 3,3 \log (37)$

   $= 1 + 3,3 (1,56)$

   $= 1 + 5.14$

   $= 6.14$

   $= 6$

4. Length of Classes $= \dfrac{range}{total\ of\ class}$ $= \dfrac{35}{6} = 5.83 = 6$

5. Mean

Interval Class	F	X	x'	fx'	x'^2	fx'^2
35 - 40	5	37,5	3	15	9	45
41 - 46	3	42,5	2	6	4	12
47 - 52	3	49,5	1	3	1	3
53- 58	15	55,5	0	0	0	0
59 - 64	7	**61.5**	-1	-7	1	7
65- 70	4	67,5	-2	-8	4	16
$i = 6$	37	-	-	9	-	83

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

$$= 61{,}5 + 6(\frac{9}{37})$$

$$= 61{,}5 + 6(0.24)$$
$$= 61{,}5 + 1.44$$
$$= 62.94$$

$$SD_t \quad = i\sqrt{\frac{\Sigma fx'^2}{N} - \left[\frac{\Sigma fx'}{N}\right]^2}$$

$$= \sqrt[6]{\frac{83}{37}} - \left(\frac{9}{37}\right)^2$$

$$= \sqrt[6]{2.24 - (0.24)^2}$$

$$= \sqrt[6]{2.24 - 0.057}$$

$$= \sqrt[6]{2.18}$$

$$= 6\,(1.47)$$

$$= 8.82$$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\frac{(f_0-f_h)}{f_h}$
	70.5	0.85	0.3023				
65 – 70				0.23	8.51	4	-0.52
	64.5	0.17	0.0675				
59 – 64				-0.34	-12.58	7	-0.44
	58.5	-0,22	0.41294				
53 – 58				0.10	3.70	15	3.05
	52.5	-0,50	0.30854				
47 – 52				0.27	9.99	3	-0.69
	46.5	-1.86	0.03144				
41 – 46				0.02	0.74	3	3.05
	40.5	-2.54	0.00554				
35 - 40				0.00	0.00	5	5.00
	34.5	-3.22	0.00064				
						X^2	9.45

Based on table above, reseracher found that $x^2_{count} = 9.45$ while $x^2_{table} = 7.815$ cause $x^2_{cause} > x^2_{table}$ (9.45 > 7.815) with degree of freedom dk $= 6 - 3 = 3$ and significat level $\alpha = 5\%$. So distribution of VIII-3 class (Pre-test) is not normal.

6. Median

No	Interval Class	F	fk
1	35 - 40	5	5
2	41 - 46	3	8
3	47 - 52	3	11
4	53- 58	15	26
5	59 - 64	7	33
6	65- 70	4	37
	$i = 6$	37	

Position of Me in the interval of classes is number 5, that:

Bb $= 45.5$

F $= 1$

fm $= 3$

i $= 6$

n $= 26$

1/2n $= 13$

So :

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

$$= 45.5 + 6 \left(\frac{13-1}{3} \right)$$

$$= 45.5 + 6 \ (12/6)$$

$$= 45,5 + 6 \ (2)$$

$$= 45,5 + 12$$

$$= 57,5$$

7. Modus

No	Interval of Classes	F	fk
1	40 - 45	1	1
2	46 – 51	3	4
3	52 – 57	2	6
4	58 – 63	6	12
5	64 – 69	6	18
6	70 – 75	7	25
7	76 – 81	1	26

$$M_o = L + \frac{d_1}{d_1 + d_2} \, i$$

L = 63.5

d_1 = 0

d_2 = -1

i = 6

$$M_o = 63.5 + \frac{0}{0 + (-1)} \, 6$$

$$= 63.5 + 0 \, (6)$$

$$= 63.5 + 0$$

$$= 63.5$$

Result of the Normality Test of VIII-4 in Pre-Test

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

   40 40 45 45 45 45 50 50 50 55

   55 55 55 55 55 60 60 60 60 60

   60 60 60 60 65 65 65 65 65 65

   65 65 70 70 70 70 70

2. High   = 70

   Low   = 40

   Range   = High − Low

   $$= 70 - 40$$
   $$= 30$$

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

   $$= 1 + 3,3 \log (37)$$
   $$= 1 + 3,3 (1.56)$$
   $$= 1 + 5.14$$
   $$= 6.14$$
   $$= 6$$

4. Length of Classes $= \dfrac{range}{total\ of\ class}$ $= \dfrac{30}{6} = 5$

5. Mean

Interval Class	f	X	x'	fx'	x'^2	fx'^2
40 – 44	2	42	4	8	16	32
45 – 49	4	47	3	12	9	36
50 – 54	3	52	2	6	4	12
55 – 59	6	57	1	6	1	6
60 – 64	9	62	0	0	0	0
65 – 69	8	67	-1	-8	1	8
70 – 74	5	72	-2	-10	4	20
$i = 5$	37	-		14		114

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

$$= 62 + 5(\frac{14}{37})$$

$$= 62 + 5\ (0.37)$$

$$= 62 + (1.85)$$

$$= 63.85$$

$$SD_t \qquad = i\ \sqrt{\frac{\Sigma fx'^2}{N} - \left[\frac{\Sigma fx'}{N}\right]^2}$$

$$= \sqrt[5]{\frac{114}{37} - \left(\frac{14}{37}\right)^2}$$

$$= \sqrt[5]{3.08 - (0.37)^2}$$

$$= \sqrt[5]{3.08 - 0.136}$$

$$= \sqrt[5]{2.944}$$

$$= 5\ (1.715)$$

$$= 8.57$$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	$Z-$ Score	Limit of Large of the Area	Large of area	f_h	f_0	$\dfrac{(f_0-f_h)}{f_h}$
	74,5	1.24	0.89251				
70 – 74				0.15	5.55	5	-0.09
	69,5	0.65	0.74215				
65 – 69				0.21	7.77	8	0.02
	64,5	0.07	0.52790				
60 – 64				0.21	7.77	9	0.15
	59,5	-0.50	0.30854				
55 – 59				0.17	6.29	6	-0.04
	54,5	-1.09	0.13786				
50 – 54				0.09	3.33	3	-0.09
	49,5	-1.67	0.04746				
45 – 49				0.03	1.11	4	2.60
	44,5	-2.25	0.01255				
40 – 44				0.02	0	2	2.00
	39,5	-2.84	0.00226				
						X^2	4.55

Based on table above,reseracher found that $x^2_{count} = 4.55$ while $x^2_{table} = 5{,}991$ cause $x^2_{cause} < x^2_{table}$ (4.55 < 5.991) with degree of freedom dk $= 5 - 3 = 2$ and significat level $\alpha = 5\%$. So distribution of VIII-4 class (Pre-test) is normal.

6. Median

No	Interval of Classes	F	fk
1	40 – 44	2	2
2	45 - 49	3	5
3	50 - 54	4	9
4	55 - 59	4	13
5	60 - 64	14	27
6	65 - 69	6	33
7	70 - 74	4	37

Position of Me in the interval of classes is number 5, that:

Bb   = 59.5

F   = 4

fm   = 14

i   = 5

n   = 37

1/2n   = 18.5

So :

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

$$= 59.5 + 5 \left(\frac{18.5 - 4}{14} \right)$$

$$= 59.5 + 5 \,(1.03)$$

$$= 59.5 + 5.15$$

$$= 64.65$$

7. Modus

No	Interval of Classes	F	fk
1	40 – 44	2	2
2	45 - 49	3	5
3	50 - 54	4	9
4	55 - 59	4	13
5	60 - 64	14	27
6	65 - 69	6	33
7	70 - 74	4	37

$$M_o = L + \frac{d_1}{d_1 + d_2} \, i$$

L   = 59.5

d_1 = 10

d_2 = 8

i   = 5

M_o = $59.5 + \frac{10}{10+8} \, 5$

= 559.5+ 0.55(5)

= 59.5 + 2.75

= 62.25

Appendix 18

HOMOGENEITY TEST (PRE-TEST)

Calculation of parameter to get variant of the first class as experimental class sample by using P2R (Preview, Read, Preview) Strategy and variant of the second class as control class sample by using conventional strategy are used homogeneity test by using formula:

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

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^2
1	35	1225
2	35	1225
3	40	1600
4	40	1600
5	40	1600
6	45	2025
7	45	2025
8	45	2025
9	45	2025
10	50	2500
11	50	2500
12	50	2500
13	50	2500
14	50	2500
15	55	3025
16	55	3025
17	55	3025
18	55	3025

19	55	3025
20	55	3025
21	55	3025
22	55	3025
23	55	3025
24	55	3025
25	55	3025
26	55	3025
27	60	3600
28	60	3600
29	60	3600
30	60	3600
31	60	3600
32	60	3600
33	65	4225
34	65	4225
35	65	4225
36	65	4225
37	65	4225
	1965	106875

$n = 37$
$\sum xi = 1965$
$\sum_{xi} 2 = 106875$

So:

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

$$\frac{37(106875) - (1965)^2}{37(37-1)}$$

$$= \frac{3954375 - 3861225}{37(36)}$$

$$= \frac{93150}{1332}$$

$$= 69.93$$

B. Variant of the VIII-2 class is:

NO	Xi	Xi^2
1	55	3025
2	65	4225
3	60	3600
4	55	3025
5	55	3025
6	40	1600
7	55	3025
8	60	2025
9	60	2025
10	55	3025
11	60	3600
12	35	1225
13	50	2500
14	50	2500
15	40	1600
16	60	3600
17	55	3025
18	55	3025
19	40	1600
20	65	4225
21	65	4225
22	50	3025
23	65	4225
24	55	3025
25	50	2500
26	45	2025
27	60	3600
28	35	1225
29	45	2025
30	60	3600
31	45	2025
32	55	3025
33	40	1600
34	50	2500
35	65	4225
36	60	4225
37	50	2500
	1965	106550

n   = 37
$\sum xi$ = 1965
$\sum_{xi} 2$ = 106550

So:

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

$$= \frac{37(106550) - (1965)^2}{37(37-1)}$$

$$= \frac{3942350 - 3861225}{37(36)}$$

$$= \frac{81125}{1332}$$

$$= 60.90$$

C. Variant of the VIII- 3 class is:

NO	Xi	Xi²
1	35	1225
2	35	1225
3	40	1600
4	40	1600
5	40	1600
6	45	2025
7	45	2025
8	45	2025
9	50	2500
10	50	2500
11	50	2500
12	55	3025
13	55	3025
14	55	3025
15	55	3025
16	55	3025
17	55	3025
18	55	3025
19	55	3025
20	55	3025
21	55	3025
22	55	3025

23	55	3025
24	55	3025
25	55	3025
26	55	3600
27	60	3600
28	60	3600
29	60	3600
30	60	3600
31	60	3600
32	60	3600
33	60	3600
34	65	4225
35	65	4225
36	65	4225
37	70	4900
	1985	109550

$$n = 37$$
$$\sum x_i = 1985$$
$$\sum x_i 2 = 109550$$

So:

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

$$\frac{37(109550) - (1985)^2}{37(37-1)}$$

$$= \frac{4032075 - 3940225}{37(36)}$$

$$= \frac{91850}{1332}$$

$$= 68.95$$

D. Variant of the VIII-4 class is:

NO	Xi	Xi^2
1	70	4900
2	60	3600
3	55	3025
4	55	3025
5	65	4225
6	60	3600
7	50	2500
8	55	3025
9	45	2025
10	40	1600
11	65	4225
12	60	3600
13	65	4225
14	60	3600
15	70	4900
16	70	4900
17	70	4900
18	55	3025
19	40	1600
20	45	2025
21	60	3600
22	45	2025
23	50	2500
24	55	3025
25	65	4225
26	65	4225
27	55	3025
28	60	3600
29	65	4225
30	45	2025
31	65	4225
32	60	3600
33	65	4225
34	60	3600
35	50	2500
36	70	4900
37	60	3600
	2070	118250

n $\quad = 37$

$\sum xi = 2070$

$\sum_{xi} 2 = 118250$

So:

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

$$= \frac{37(118250) - (2070)^2}{37(37-1)}$$

$$= \frac{439467 - 4305625}{37(36)}$$

$$= \frac{89050}{1332}$$

$$= 66.85$$

The Formula was used to test hypothesis was:

1. VIII-1 and VIII-2 :

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

So:

$$F = \frac{69.93}{60.90}$$

$$= 1.14$$

After doing the calculation, researcher found that $F_{count} = 1.14$ with α 5 % and dk $= 37$ from the distribution list F, researcher found that $F_{table} = 1,697$, cause $F_{count} < F_{table}$ (1.14< 1,697). 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 :

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

So:

$$F = \frac{69.93}{68.95}$$
$$= 1.01$$

After doing the calculation, researcher found that $F_{count} = 1.01$ with α 5 % and dk $= 37$ from the distribution list F, researcher found that $F_{table} = 1,697$, cause $F_{count} < F_{table}$ (1.01 < 1,697). 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-1 and VIII- 4 :

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

So:

$$F = \frac{69.93}{66.85}$$
$$= 1.04$$

After doing the calculation, researcher found that $F_{count} = 1.04$ with α 5 % and dk $= 37$ from the distribution list F, researcher found that $F_{table} = 1,697$, cause $F_{count} < F_{table}$ (1.04 < 1,697). So, there is no difference the variant between the VIII-1 class and VIII-4 class. It means that the variant is homogenous.

4. VIII-2 and VIII- 3:

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

So:

$$F = \frac{68.95}{60.90}$$
$$= 1.13$$

After doing the calculation, researcher found that $F_{count} = 1.13$ with α 5 % and dk $= 37$ from the distribution list F, researcher found that $F_{table} = 1,697$, cause $F_{count} < F_{table}$ (1.13 < 1,697). So, there is no difference the variant between the VIII-2 class and VIII- 3 class. It means that the variant is homogenous.

5. VIII- 2 and VIII-4:

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

So:

$$F = \frac{66.85}{60.90}$$
$$= 1.09$$

After doing the calculation, researcher found that $F_{count} = 1.09$ with α 5 % and dk $= 37$ from the distribution list F, researcher found that $F_{table} = 1,697$, cause $F_{count} < F_{table}$ (1.09 < 1,697). So, there is no difference the variant between the VIII-2 class and VIII-4 class. It means that the variant is homogenous.

6. VIII-3 and VIII-4:

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

So:

$$F = \frac{68.95}{66.85}$$
$$= 1.03$$

After doing the calculation, researcher found that $F_{count} = 1.03$ with α 5 % and dk $= 37$ from the distribution list F, researcher found that $F_{table} = 1,697$, cause $F_{count} < F_{table}$ (1.03 < 1,697). So, there is no difference the variant between the VIII-3 class and VIII-4 class. It means that the variant is homogenous.

Appendix 19

Score of Experimental Class and control Class Post Test

1. **Score of Experimental Class Post-Test after using P2R (Preview, Read, Review) Strategy**

The Initial Name of Students (n)	Pre-Test	The Initial Name of Students (n)	Post-Test
1. Abdullah Amsari	85	21. Maulida Fitri	95
2. Ade Andriyani	90	22. Mery Ayu Lita	90
3. Adelia Rosa	80	23. Miska Hayani	70
4. Ahmad Kasmir	90	24. M. Karim	80
5. Aman Sahran	85	25. Nelli Agustina	70
6. Anggi Nauli	75	26. Nur Asiah	80
7. Anhar Perdana	80	27. Nur Mahrani	95
8. Annisa Fitri	80	28. Nur Walimah	70
9. Annisa Rani	80	29. Putri indah Amalia	90
10. Asmidar	75	30. Riski Marito	70
11. Azizah Putri Syafa	80	31. Sakinah	80
12. Cindy Lestary	75	32. Shoifuddin Sholeh	80
13. Desi Rahma Yanti	80	33. Siti Anggraeni	80
14. Dinda Tia Padani	85	34. Siti Arofah	80
15. Fenny Ade Annisah	95	35. Siti Wahyuni	65
16. Kessy Lanawa	85	36. Yeni Pratiwi	75
17. Khoirul Yahya	90	37. Yuyun Saragi	80
18 lia Fitriani	80		
19. Iis Harisandy	80		
20. Laili Syafarindah	65		
Total		2985	

2. The Score of Control Class Post Test by Using Conventional Strategy

The Initial Name of Students (n)	Pre-Test	The Initial Name of Students (n)	Pre-Test
1. Ainun Setia Ningsih	75	21. Nur Fadilah Hrp	85
2. Andriansyah	60	22. Pebrina	75
3. Anni Fazirah	80	23. Potan Syahmuda	70
4. Annisa Putri	70	24. Putri Derlina	70
5. Ayu Andira	75	25. Putri Maya Sari	80
6. Fitriani Hafizah	75	26. Rahma yani	75
7. Fitriya Hairani	65	27. Rizky Alwi	65
8. Hendika	90	28. Saida Amelia	80
9. Hesna Hasmia	85	29. Nur Sakinah	80
10. Hiyasni Ayu	90	30. Sukma Ayu Lestari	85
11. Husnatul Hidayah	75	31. Syahida Sholih	85
12. Indri Wahyuni Rahayu	70	32. Tanti Rahmayani	70
13. Ilham Arya Siddiq	75	33. Usna varianti	65
14. Khoirunnisa	75	34. Wan Apriyanti	90
15. Lusi Anggiani	60	35. Yayang Widya	85
16. Mentari Ramadhani	75	36. Yusril Rahwan	70
17. Mia Yudina Yanti	90	37. Tomy Irawan	60
18. M. Abdul Rozak	65		
19. M. Abdul Shaleh	65		
20. Nur Fadilah Asri	60		
Total		2765	

Appendix 20

RESULT OF THE NORMALITY TEST OF EXPERIMENT CLASS
IN POST-TEST

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

    65 65 70 70 70 70 75 75 75 75

    80 80 80 80 80 80 80 80 80 80

    80 80 80 80 80 85 85 85 85 90

    90 90 90 90 95 95 95

2. High   = 95

    Low   = 65

    Range   = High − Low

    $$= 95 - 65$$
    $$= 30$$

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

    $$= 1 + 3,3 \log (37)$$
    $$= 1 + 3,3 (1.56)$$
    $$= 1 + 5.14$$
    $$= 6.14$$
    $$= 6$$

4. Length of Classes $= \dfrac{range}{total\ of\ class}$ $= \dfrac{30}{6} = 5$

5. Mean

Interval Class	f	X	x'	fx'	x'^2	fx'^2
65 – 69	2	67	3	6	9	18
70 – 74	4	72	2	8	4	16
75 – 79	4	77	1	4	1	4
80 – 84	15	82	0	0	0	0
85 – 89	4	87	-1	-4	1	16
90 – 94	5	92	-2	-10	4	20
95 – 99	3	97	-3	-9	9	27
$i = 5$	37	-		-5		101

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

$$= 82 + 5\left(\frac{-5}{37}\right)$$

$$= 82 + 5\,(-0.13)$$

$$= 82 + (-0.65)$$

$$= 81.35$$

$$SD_t \quad = i\sqrt{\frac{\Sigma fx'^2}{N} - \left[\frac{\Sigma fx'}{N}\right]^2}$$

$$= 5\sqrt{\frac{101}{37} - \left(\frac{-5}{37}\right)^2}$$

$$= 5\sqrt{2.72 - (-0.13)^2}$$

$$= 5\sqrt{2.72 - 0.016}$$

$$= 5\sqrt{2.704}$$

$$= 5\,(1.64)$$

$$= 8.2$$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\frac{(f_0 - f_h)}{f_h}$
	99.5	2.21	0.98645				
95 – 99				0.04	1.48	3	1.02
	94.5	1.56	0.94062				
90 – 94				0.11	4.07	5	0.22
	89.5	0.95	0.82894				
85 – 89				0.19	7.03	4	-0.43
	84.5	0.34	0.63307				
80 – 84				0.23	8.51	15	0.76
	79.5	-0.26	0.39743				
75 – 79				0.20	7.4	4	-0.45
	74.5	-0.87	0.19215				
70 – 74				0.12	4.44	4	-0.09
	69.5	-1.48	0. 06944				
65 – 69				0.05	1.85	2	0.08
	64.5	-2.09	0.01831				
						X^2	1.11

Based on table above, reseracher found that $x^2_{count} = 1.11$ while $x^2_{table} = 5,991$ cause $x^2_{cause} < x^2_{table}$ (1.11 < 5.991) with degree of freedom dk = 5 − 3 = 2 and significat level α = 5%. So distribution of experiment class (Post Test) was normal.

6. Median

No	Interval of Classes	F	fk
1	65 - 69	2	2
2	70 - 74	4	6
3	75 - 79	4	10
4	80 - 84	15	25
5	85 - 89	4	29
6	90 - 94	5	34
7	95 - 99	3	37

Position of Me in the interval of classes is number 4, that:

Bb $= 79.5$

F $= 4$

fm $= 15$

i $= 5$

n $= 37$

1/2n $= 18.5$

So :

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

$$= 79.5 + 5 \left(\frac{18.5 - 4}{15} \right)$$

$$= 79.5 + 5 \,(0.96)$$

$$= 79.5 + 4.8$$

$$= 84.3$$

7. Modus

No	Interval of Classes	F	fk
1	65 - 69	2	2
2	70 - 74	4	6
3	75 - 79	4	10
4	80 - 84	15	25
5	85 - 89	4	29
6	90 - 94	5	34
7	95 - 99	3	37

$$M_o = L + \frac{d_1}{d_1 + d_2} \, i$$

L $= 79.5$

d_1 $= 11$

d_2 $= 11$

i $= 5$

M_o $= 79.5 + \frac{11}{11+11} \, 5$

         $= 79.5 + 0.5(5)$

         $= 79.5 + 2.5$

         $= 82$

Appendix 21

RESULT OF THE NORMALITY TEST OF CONTROL CLASS
IN POST TEST

1. The score of control class in post test from low score to high score:

   60 60 60 60 65 65 65 65 65 65

   70 70 70 70 70 70 75 75 75 75

   75 75 75 75 75 75 75 75 80 80

   80 80 80 85 85 90 90

2. High   = 90

   Low   = 60

   Range   = High − Low

   = 90 − 60

   = 30

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

   = 1 + 3,3 log (37)

   = 1 + 3,3 (1.56)

   = 1 + 5.14

   = 6.148

   = 6

4. Length of Classes $= \dfrac{range}{total\ of\ class}$ $= \dfrac{30}{6} = 5$

5. Mean

Interval Class	F	X	x'	fx'	x'^2	fx'^2
60 - 64	4	62	3	12	9	36
65 - 69	5	67	2	10	4	20
70 - 74	6	72	1	6	1	6
75 - 79	9	77	0	0	0	0
80 - 84	5	82	-1	-5	1	5
85 - 89	4	87	-2	-8	4	8
90 - 94	4	92	-3	-12	9	12
i =5	37	-	-	5	-	88

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

$$= 77 + 5\left(\frac{5}{37}\right)$$

$$= 77 + 5(0.13)$$

$$= 77 + (0.65)$$

$$= 77.65$$

$$\text{SD}_t \quad = i\sqrt{\frac{\Sigma fx'^2}{N} - \left[\frac{\Sigma fx'}{N}\right]^2}$$

$$= 5\sqrt{\frac{88}{37} - \left(\frac{5}{37}\right)^2}$$

$$= 5\sqrt{2.37 - (0.13)^2}$$

$$= 5\sqrt{2.37 - 0.016}$$

$$= 5\sqrt{2.24}$$

$$= 6\,(1.77)$$

$$= 11.2$$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\frac{(f_0-f_h)}{f_h}$
	94.5	1.50	0.93319				
90 - 94				0.08	2.96	4	0.35
	89.5	1.05	0.85314				
85 – 89				0.12	4.44	4	0.57
	84.5	0.61	0.72907				
80 – 84				0.16	5.92	5	-0.15
	79.5	0.16	0.56356				
75 – 79				0.17	6.29	9	0.43
	74.5	-0.28	0.38974				
70– 74				0.15	5.55	6	0.08
	69.5	-0.72	0.23576				
65- 69				0.11	4.07	5	0.22
	64.5	-1.17	0.12100				
60 - 64				0.06	2.22	4	0.80
	59.5	-1.62	0 .05262				
						X^2	2.30

Based on table above, reseracher found that $x^2_{count} = 2.30$ while $x^2_{table} =$ 5.991 cause $x^2_{cause} < x^2_{table}$ (2.30 < 5.991) with degree of freedom dk $= 5 - 3 = 2$ and significat level $\alpha = 5\%$. So distribution of control class (Post-test) was normal.

6. Median

No	Interval Class	F	fk
1	60 - 64	4	4
2	65 - 69	5	9
3	70 - 74	6	15
4	75 - 79	9	24
5	80 - 84	5	29
6	85 - 89	4	33
7	90 - 94	4	37

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

Bb $\quad = 74.5$

F $\quad = 6$

fm $\quad = 9$

i $\quad = 5$

n $\quad = 37$

1/2n $\quad = 18.5$

So :

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

$$= 74.5 + 5 \left(\frac{18.5 - 6}{9} \right)$$

$$= 74.5 + 5 \ (1.38)$$

$$= 74.5 + 6.9$$

$$= 81.4$$

7. Modus

No	Interval Class	F	fk
1	60 - 64	4	4
2	65 - 69	5	9
3	70 - 74	6	15
4	75 - 79	9	24
5	80 - 84	5	29
6	85 - 89	4	33
7	90 - 94	4	37

$$M_o = L + \frac{d_1}{d_1 + d_2} i$$

$L = 74.5$

$d_1 = 3$

$d_2 = 4$

$i = 5$

$M_o = 74.5 + \frac{3}{3+4} 5$

$= 74.5 + 0.42 (5)$

$= 74.5 + 2.1$

$= 76.3$

Appendix 20

RESULT OF THE NORMALITY TEST OF EXPERIMENT CLASS
IN POST-TEST

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

   65 65 70 70 70 70 75 75 75   75

   80 80 80 80 80 80 80 80 80   80

   80 80 80 80 80 85 85 85 85   90

   90 90 90 90 95 95 95

2. High   = 95

   Low   = 65

   Range   = High – Low

   $\qquad\qquad$ = 95 – 65
   $\qquad\qquad$ = 30

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

   $\qquad\qquad\qquad$ = 1 + 3,3 log (37)

   $\qquad\qquad\qquad$ = 1 + 3,3 (1.56)

   $\qquad\qquad\qquad$ = 1 + 5.14

   $\qquad\qquad\qquad$ = 6.14

   $\qquad\qquad\qquad$ = 6

4. Length of Classes $= \dfrac{range}{total\ of\ class}$ $\qquad = \dfrac{30}{6} = 5$

5. Mean

Interval Class	f	X	x'	fx'	x'^2	fx'^2
65 – 69	2	67	3	6	9	18
70 – 74	4	72	2	8	4	16
75 – 79	4	77	1	4	1	4
80 – 84	15	82	0	0	0	0
85 – 89	4	87	-1	-4	1	16
90 – 94	5	92	-2	-10	4	20
95 – 99	3	97	-3	-9	9	27
$i = 5$	37	-		-5		101

$$Mx = M^1 + i\frac{\Sigma fx^1}{N}$$

$$= 82 + 5\left(\frac{-5}{37}\right)$$

$$= 82 + 5\,(\text{-}0.13)$$

$$= 82 + (\text{-}0.65)$$

$$= 81.35$$

$$SD_t \quad = i\sqrt{\frac{\Sigma fx'^2}{N} - \left[\frac{\Sigma fx'}{N}\right]^2}$$

$$= \sqrt[5]{\frac{101}{37} - \left(\frac{-5}{37}\right)^2}$$

$$= \sqrt[5]{2.72 - (-0.13)^2}$$

$$= \sqrt[5]{2.72 - 0.016}$$

$$= \sqrt[5]{2.704}$$

$$= 5\,(1.64)$$

$$= 8.2$$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\dfrac{(f_0 - f_h)}{f_h}$
	99.5	2.21	0.98645				
95 – 99				0.04	1.48	3	1.02
	94.5	1.56	0.94062				
90 – 94				0.11	4.07	5	0.22
	89.5	0.95	0.82894				
85 – 89				0.19	7.03	4	-0.43
	84.5	0.34	0.63307				
80 – 84				0.23	8.51	15	0.76
	79.5	-0.26	0.39743				
75 – 79				0.20	7.4	4	-0.45
	74.5	-0.87	0.19215				
70 – 74				0.12	4.44	4	-0.09
	69.5	-1.48	0. 06944				
65 – 69				0.05	1.85	2	0.08
	64.5	-2.09	0.01831				
						X^2	1.11

Based on table above, reseracher found that $x^2{}_{count} = 1.11$ while $x^2{}_{table} = 5,991$ cause $x^2{}_{cause} < x^2{}_{table}$ (1.11 < 5.991) with degree of freedom dk $= 5 - 3 = 2$ and significat level $\alpha = 5\%$. So distribution of experiment class (Post Test) was normal.

6. Median

No	Interval of Classes	F	fk
1	65 - 69	2	2
2	70 - 74	4	6
3	75 - 79	4	10
4	80 - 84	15	25
5	85 - 89	4	29
6	90 - 94	5	34
7	95 - 99	3	37

Position of Me in the interval of classes is number 4, that:

$$\text{Bb} = 79.5$$
$$\text{F} = 4$$
$$\text{fm} = 15$$
$$\text{i} = 5$$
$$\text{n} = 37$$
$$1/2\text{n} = 18.5$$

So :

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

$$= 79.5 + 5 \left(\frac{18.5 - 4}{15} \right)$$

$$= 79.5 + 5\ (0.96)$$

$$= 79.5 + 4.8$$

$$= 84.3$$

7. Modus

No	Interval of Classes	F	fk
1	65 - 69	2	2
2	70 - 74	4	6
3	75 - 79	4	10
4	80 - 84	15	25
5	85 - 89	4	29
6	90 - 94	5	34
7	95 - 99	3	37

$$M_o = L + \frac{d_1}{d_1 + d_2} \, i$$

L   = 79.5

d_1 = 11

d_2 = 11

i   = 5

M_o $= 79.5 + \frac{11}{11+11} \, 5$

        $= 79.5 + 0.5(5)$

        $= 79.5 + 2.5$

        $= 82$

Appendix 21

RESULT OF THE NORMALITY TEST OF CONTROL CLASS
IN POST TEST

1. The score of control class in post test from low score to high score:

   60 60 60 60 65 65 65 65 65 65

   70 70 70 70 70 70 75 75 75 75

   75 75 75 75 75 75 75 75 80 80

   80 80 80 85 85 90 90

2. High   = 90

   Low   = 60

   Range   = High – Low
   $$= 90 - 60$$
   $$= 30$$

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

   $$= 1 + 3,3 \log (37)$$

   $$= 1 + 3,3 (1.56)$$

   $$= 1 + 5.14$$

   $$= 6.148$$

   $$= 6$$

4. Length of Classes $= \dfrac{range}{total\ of\ class}$ $= \dfrac{30}{6} = 5$

5. Mean

Interval Class	F	X	x'	fx'	x'^2	fx'^2
60 - 64	4	62	3	12	9	36
65 - 69	5	67	2	10	4	20
70 - 74	6	72	1	6	1	6
75 - 79	9	77	0	0	0	0
80 - 84	5	82	-1	-5	1	5
85 - 89	4	87	-2	-8	4	8
90 - 94	4	92	-3	-12	9	12
$i = 5$	37	-	-	5	-	88

$$Mx = M^1 + i \frac{\Sigma fx^1}{N}$$

$$= 77 + 5 \left(\frac{5}{37}\right)$$

$$= 77 + 5(0.13)$$

$$= 77 + (0.65)$$

$$= 77.65$$

$$SD_t \quad = i \sqrt{\frac{\Sigma fx'^2}{N} - \left[\frac{\Sigma fx'}{N}\right]^2}$$

$$= \sqrt[5]{\frac{88}{37}} - \left(\frac{5}{37}\right)^2$$

$$= \sqrt[5]{2.37 - (0.13)^2}$$

$$= \sqrt[5]{2.37 - 0.016}$$

$$= \sqrt[5]{2.24}$$

$$= 6 \,(1.77)$$

$$= 11.2$$

Table of Normality Data Test with Chi Kuadrad Formula

Interval of Score	Real Upper Limit	Z – Score	Limit of Large of the Area	Large of area	f_h	f_0	$\dfrac{(f_0 - f_h)}{f_h}$
	94.5	1.50	0.93319				
90 - 94				0.08	2.96	4	0.35
	89.5	1.05	0.85314				
85 – 89				0.12	4.44	4	0.57
	84.5	0.61	0.72907				
80 – 84				0.16	5.92	5	-0.15
	79.5	0.16	0.56356				
75 – 79				0.17	6.29	9	0.43
	74.5	-0.28	0.38974				
70– 74				0.15	5.55	6	0.08
	69.5	-0.72	0.23576				
65- 69				0.11	4.07	5	0.22
	64.5	-1.17	0.12100				
60 - 64				0.06	2.22	4	0.80
	59.5	-1.62	0 .05262				
						X^2	2.30

Based on table above,reseracher found that $x^2_{count} = 2.30$ while $x^2_{table} = 5.991$ cause $x^2_{cause} < x^2_{table}$ (2.30 < 5.991) with degree of freedom dk = 5 − 3 = 2 and significat level $\alpha = 5\%$. So distribution of control class (Post-test) was normal.

6. Median

No	Interval Class	F	fk
1	60 - 64	4	4
2	65 - 69	5	9
3	70 - 74	6	15
4	75 - 79	9	24
5	80 - 84	5	29
6	85 - 89	4	33
7	90 - 94	4	37

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

Bb $\quad$ = 74.5

F $\quad$ = 6

fm $\quad$ = 9

i $\quad$ = 5

n $\quad$ = 37

1/2n $\quad$ =18.5

So :

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

$$= 74.5 + 5 \left(\frac{18.5 - 6}{9} \right)$$

$$= 74.5 + 5 \ (1.38)$$

$$= 74.5 + 6.9$$

$$= 81.4$$

7. Modus

No	Interval Class	F	fk
1	60 - 64	4	4
2	65 - 69	5	9
3	70 - 74	6	15
4	75 - 79	9	24
5	80 - 84	5	29
6	85 - 89	4	33
7	90 - 94	4	37

$$M_o \quad = L + \frac{d_1}{d_1 + d_2} \; i$$

L $\quad = 74.5$

$d_1 \quad = 3$

$d_2 \quad = 4$

i $\quad = 5$

$M_o \quad = 74.5 + \frac{3}{3+4} \; 5$

$= 74.5 + 0.42 \, (5)$

$= 74.5 + 2.1$

$= 76.3$

Appendix 22

HOMOGENEITY TEST (POST TEST)

1. EXPERIMENT CLASS

NO	Xi	Xi^2
1	85	7225
2	90	8100
3	80	6400
4	90	8100
5	85	7225
6	75	5625
7	80	6400
8	80	6400
9	80	6400
10	75	5625
11	80	6400
12	75	5625
13	80	6400
14	85	7225
15	95	9025
16	85	7225
17	90	8100
18	80	6400
19	80	6400
20	65	4225
21	95	9025
22	90	8100
23	70	4900
24	80	6400
25	70	4900
26	80	6400
27	95	9025
28	70	4900
29	90	8100
30	70	4900
31	80	6400
32	80	6400
33	80	6400

34	80	6400
35	65	4225
36	75	5625
37	80	6400
	2985	243025

$n \quad = 37$

$\sum xi \ = 2985$

$\sum_{xi} 2 \ = 243025$

So:

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

$$= \frac{37(243025) - (2985)^2}{37(37-1)}$$

$$= \frac{8991925 - 8910225}{37(36)}$$

$$= \frac{81700}{1332}$$

$$= 61.33$$

2. CONTROL CLASS

NO	Xi	Xi^2
1	75	5625
2	60	3600
3	80	6400
4	70	4900
5	75	5625
6	75	5625
7	65	4225
8	90	8100
9	85	7225
10	90	8100
11	75	5625
12	70	4900
13	75	5625
14	75	5625
15	60	3600
16	75	5625
17	90	8100
18	65	4225
19	65	4225
20	60	3600
21	85	7225
22	75	5625
23	70	4900
24	70	4900
25	80	5625
26	75	5625
27	65	3600
28	80	6400
29	80	6400
30	85	7225
31	85	7225
32	70	4900
33	65	4225
34	90	8100
35	85	7225
36	70	4900
37	60	3600
	2765	208275

n   = 37
$\sum xi$ = 2765
$\sum_{xi} 2$ = 208275

So:

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

$$= \frac{37(208275) - (2765)^2}{37(37-1)}$$

$$= \frac{7706175 - 7645225}{37(36)}$$

$$= \frac{60950}{1332}$$

$$= 45.75$$

The Formula was used to test hypothesis was:

1. VIII-1 and VIII-2 :

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

So:

$$F = \frac{61.33}{45.75}$$

$$= 1.34$$

After doing the calculation, researcher found that $F_{count} = 1{,}34$ with α 5 % and dk = 37 from the distribution list F, researcher found that $F_{table} = 1{,}697$, cause $F_{count} < F_{table}$ (1,34< 1,697). So, there is no difference the variant between the VIII-1 class and VIII- 2 class. It means that the variant is homogenous.

Appendix 23

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:

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

So:

$$S = \sqrt{\frac{(37-1)\,69.93 + (37-2)60.90}{37+37-2}}$$

$$= \sqrt{\frac{36\,(60.90) + 35\,(69.93)}{72}}$$

$$= \sqrt{\frac{2517.4 + 2131.5}{72}}$$

$$= \sqrt{\frac{4648.9}{72}}$$

$$= \sqrt{64.5680}$$

$$= 8.03$$

So:

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

$$t = \frac{59.55 - 58.85}{8.03\sqrt{\dfrac{1}{37} + \dfrac{1}{37}}}$$

$$= \frac{0.7}{8.03\sqrt{0,027 + 0.027}}$$

$$= \frac{0.7}{8.03\,(0.054)}$$

$$= \frac{0.7}{0.43}$$

$$= 0.16$$

Based on researcher calculation result of the homogeneity test of the both averages, researcher found that $t_{count} = 0.16$ with opportunity $(1 - \alpha) = 1 - 5\% = 95\%$ and dk $= n_1 + n_2 - 2 = 37 + 37 - 2 = 72$, reseracher found that $t_{table} = 1{,}671$, cause $t_{count} < t_{table}$ (0.16< 1.671). So, H_a 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 24

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:

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

So:

$$S = \sqrt{\frac{(37 - 1)\,61.33 + (37 - 2)45.75}{37 + 37 - 2}}$$

$$= \sqrt{\frac{37\,(61.33) + 35\,(45.75)}{72}}$$

$$= \sqrt{\frac{2269.21 + 1601.25}{72}}$$

$$= \sqrt{\frac{2134,76}{72}}$$

$$= \sqrt{53.75}$$

$$= 7.33$$

So:

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

$$t = \frac{81.35 - 77.65}{7.33\sqrt{\frac{1}{37} + \frac{1}{37}}}$$

$$= \frac{3.7}{7.33\sqrt[3]{0{,}027 + 0.027}}$$

$$= \frac{3.7}{7.33\,(0.054)}$$

$$= \frac{3.7}{0{,}39}$$

$$= 4.11$$

Based on researcher calculation result of the homogeneity test of the both averages, researcher found that t_{count} = 4.11 with opportunity $(1-\alpha) = 1 - 5\% = 95\%$ and dk = $n_1 + n_2$ -2 = 37+ 37 − 2 = 72 , reseracher found that t_{table} = 1.671, cause t_{count} > t_{table} (4.11 > 1.671). So, H_a was accepted, it means there was the difference average between the first class as experimental class and the second class as control class in this research.

APPENDIX 25

Chi-Square Table

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

Z-Table

Z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
-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
-1.7	0.04457	0.04363	0.04272	0.04182	0.04093	0.04006	0.03920	0.03836	0.03754	0.03673
-1.6	0.05480	0.05370	0.05262	0.05155	0.05050	0.04947	0.04846	0.04746	0.04648	0.04551

-1.5	0.06681	0.06552	0.06426	0.06301	0.06178	0.06057	0.05938	0.05821	0.05705	0.05592
-1.4	0.08076	0.07927	0.07780	0.07636	0.07493	0.07353	0.07215	0.07078	0.06944	0.06811
-1.3	0.09680	0.09510	0.09342	0.09176	0.09012	0.08851	0.08691	0.08534	0.08379	0.08226
-1.2	0.11507	0.11314	0.11123	0.10935	0.10749	0.10565	0.10383	0.10204	0.10027	0.09853
-1.1	0.13567	0.13350	0.13136	0.12924	0.12714	0.12507	0.12302	0.12100	0.11900	0.11702
-1.0	0.15866	0.15625	0.15386	0.15151	0.14917	0.14686	0.14457	0.14231	0.14007	0.13786
-0.9	0.18406	0.18141	0.17879	0.17619	0.17361	0.17106	0.16853	0.16602	0.16354	0.16109
-0.8	0.21186	0.20897	0.20611	0.20327	0.20045	0.19766	0.19489	0.19215	0.18943	0.18673
-0.7	0.24196	0.23885	0.23576	0.23270	0.22965	0.22663	0.22363	0.22065	0.21770	0.21476
-0.6	0.27425	0.27093	0.26763	0.26435	0.26109	0.25785	0.25463	0.25143	0.24825	0.24510
-0.5	0.30854	0.30503	0.30153	0.29806	0.29460	0.29116	0.28774	0.28434	0.28096	0.27760
-0.4	0.34458	0.34090	0.33724	0.33360	0.32997	0.32636	0.32276	0.31918	0.31561	0.31207
-0.3	0.38209	0.37828	0.37448	0.37070	0.36693	0.36317	0.35942	0.35569	0.35197	0.34827
-0.2	0.42074	0.41683	0.41294	0.40905	0.40517	0.40129	0.39743	0.39358	0.38974	0.38591
-0.1	0.46017	0.45620	0.45224	0.44828	0.44433	0.44038	0.43644	0.43251	0.42858	0.42465
-0.0	0.50000	0.49601	0.49202	0.48803	0.48405	0.48006	0.47608	0.47210	0.46812	0.46414

Z-Table

z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	0.0000	0.0040	0.0080	0.0120	0.0160	0.0199	0.0239	0.0279	0.0319	0.0359
0.1	0.0398	0.0438	0.0478	0.0517	0.0557	0.0596	0.0636	0.0675	0.0714	0.0753
0.2	0.0793	0.0832	0.0871	0.0910	0.0948	0.0987	0.1026	0.1064	0.1103	0.1141
0.3	0.1179	0.1217	0.1255	0.1293	0.1331	0.1368	0.1406	0.1443	0.1480	0.1517
0.4	0.1554	0.1591	0.1628	0.1664	0.1700	0.1736	0.1772	0.1808	0.1844	0.1879
0.5	0.1915	0.1950	0.1985	0.2019	0.2054	0.2088	0.2123	0.2157	0.2190	0.2224
0.6	0.2257	0.2291	0.2324	0.2357	0.2389	0.2422	0.2454	0.2486	0.2517	0.2549
0.7	0.2580	0.2611	0.2642	0.2673	0.2704	0.2734	0.2764	0.2794	0.2823	0.2852
0.8	0.2881	0.2910	0.2939	0.2967	0.2995	0.3023	0.3051	0.3078	0.3106	0.3133
0.9	0.3159	0.3186	0.3212	0.3238	0.3264	0.3289	0.3315	0.3340	0.3365	0.3389
1.0	0.3413	0.3438	0.3461	0.3485	0.3508	0.3531	0.3554	0.3577	0.3599	0.3621
1.1	0.3643	0.3665	0.3686	0.3708	0.3729	0.3749	0.3770	0.3790	0.3810	0.3830
1.2	0.3849	0.3869	0.3888	0.3907	0.3925	0.3944	0.3962	0.3980	0.3997	0.4015
1.3	0.4032	0.4049	0.4066	0.4082	0.4099	0.4115	0.4131	0.4147	0.4162	0.4177
1.4	0.4192	0.4207	0.4222	0.4236	0.4251	0.4265	0.4279	0.4292	0.4306	0.4319
1.5	0.4332	0.4345	0.4357	0.4370	0.4382	0.4394	0.4406	0.4418	0.4429	0.4441
1.6	0.4452	0.4463	0.4474	0.4484	0.4495	0.4505	0.4515	0.4525	0.4535	0.4545
1.7	0.4554	0.4564	0.4573	0.4582	0.4591	0.4599	0.4608	0.4616	0.4625	0.4633
1.8	0.4641	0.4649	0.4656	0.4664	0.4671	0.4678	0.4686	0.4693	0.4699	0.4706
1.9	0.4713	0.4719	0.4726	0.4732	0.4738	0.4744	0.4750	0.4756	0.4761	0.4767
2.0	0.4772	0.4778	0.4783	0.4788	0.4793	0.4798	0.4803	0.4808	0.4812	0.4817
2.1	0.4821	0.4826	0.4830	0.4834	0.4838	0.4842	0.4846	0.4850	0.4854	0.4857
2.2	0.4861	0.4864	0.4868	0.4871	0.4875	0.4878	0.4881	0.4884	0.4887	0.4890
2.3	0.4893	0.4896	0.4898	0.4901	0.4904	0.4906	0.4909	0.4911	0.4913	0.4916
2.4	0.4918	0.4920	0.4922	0.4925	0.4927	0.4929	0.4931	0.4932	0.4934	0.4936
2.5	0.4938	0.4940	0.4941	0.4943	0.4945	0.4946	0.4948	0.4949	0.4951	0.4952
2.6	0.4953	0.4955	0.4956	0.4957	0.4959	0.4960	0.4961	0.4962	0.4963	0.4964
2.7	0.4965	0.4966	0.4967	0.4968	0.4969	0.4970	0.4971	0.4972	0.4973	0.4974

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

APPENDIX 27

Percentage Points of the t Distribution

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

Appendix 28

PHOTO RESEARCH

CHAPTER I

INTRODUCTION

A. Background of the Problem

English is very important and has many interrelationships with various aspects of life owned by human being. In English, there are four skills that must be mastered. They are listening, speaking, reading and writing. These are very important to be learned and mastered. In this case, the researcher focuses on reading that is one of problematicsin English learning, especially in reading comprehension.

Reading is a complex process that includes physical and mental process. The physic activities occur by stimulation of the eyes. These activitiesarebegun by observing pictures or sounds of the written language. Reading is one of the important skills. By reading, students get much information and increase knowledge and experience. By having a good skill in reading, the students will be easy to get information from many sources from books, magazines, newspapers, brochures and etcetera. On the other hand, if the students have a good ability in reading, they will be successful in their studying because they understand what the text talk about.

Allah The All Merciful explain about reading, especially reading Holy Book, that Allah will give them knowledge and most of bounty at Surah Fathir, Verse 29-30:

ُونَ وَعَلَانِيَةٗ سِرّٗا رَزَقۡنَٰهُمۡ مِمَّا وَأَنفَقُوا۟ ٱلصَّلَوٰةَ وَأَقَامُوا۟ ٱللَّهِ كِتَٰبَ يَتۡلُونَ ٱلَّذِينَ إِنَّ شَكُورٌ غَفُورٌ إِنَّهُۥ فَضۡلِهِۦ مِّن وَيَزِيدَهُم أُجُورَهُمۡ لِيُوَفِّيَهُمۡ ٣٠ تَبُورَ لَّن تِجَٰرَةٗ يَرۡجُ ٢٩

> The meaning: "(29).Verily, those who recite the book of Allah (this Qur'an) and perform *As-Shalat (Iqamat-as-Salat)*, and spend (in charity) out of what we have provided for them, secretly and openly, they hope for a (sure) trade-gain that will never perish. (30). That He may pay them their wages in full, and give them (even) more, out of His Grace. Verily, He is Oft-Forgiving, Most Ready to appreciate (good deeds and to recompense)".[1]

Reading is an activity to transfer the knowledge from the text to mind. The knowledge is very important. It is impossible to gain information from the text without reading.Therefore there are few reasons why reading necessary in the life.

First, Reading isan essential skill for learners. For most of these learners, it is the most important skill to be mastered in order to ensure success not only in learning English. But also, in learning any contents classes where reading in English is required.

Second, reading activatesmind, gets a lot of knowledge about many things in the world such as sciences, technologies, sports, arts, cultures, religious,

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[1] Muhammad Taqi'uddin Al-Hilali.*Translation of the Meaning of the Noble Qur'an in the English Language.*(Madinah: King Fahd Complex for the Printing of the Holy Qur'an. 1404 H), p. 585.

etcetera. Besides, reading makes the brain relax, interacts with the feelings and thought, obtains information and improving the science or knowledge and also gives pleasure. Based on the illustration above, researcher makes inference that reading is very important in the life.

Allah also orders us to read, as said in Al-Qur'an, surah Al-Alaq verse 1-5 as follow:

عَلَّمَ ٱلَّذِى ۞ ٱلْأَكْرَمُ وَرَبُّكَ ٱقْرَأْ ۞ عَلَقٍ مِنْ ٱلْإِنسَـٰنَ خَلَقَ ۞ خَلَقَ ٱلَّذِى رَبِّكَ بِٱسْمِ ٱقْرَأْ ۞ يَعْلَمْ لَمْ مَا ٱلْإِنسَـٰنَ عَلَّمَ ۞ بِٱلْقَلَمِ

> The meaning: "(1).Read! In the name of your Lord who has created (all the exists). (2). He has created man from a clot (a piece of thick coagulated blood. (3). Read! And your Lord is the most Generous. (4). Who has taught (the writing) by the pen. (5). He has taught men that which He knew not".[2]

According to surah Al-Alaq verse 1-5, thus verses had described to people how important reading in people life is, until Allah orders human to read. It is caused from reading; students can comprehend something, and all the things in this world, especially their God, The Merciful and creator of the world and all the things on. So, reading is very important, especially for students. However, reading isstill a problem in school,especially at MTs Negeri 2 Padangsidimpuan. It could be seen based on illustration below.

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[2]*Ibid.,*p. 842.

First, based on interview with the teacher,[3] most of the students still get low grade with 68 grade meanwhile the standard of English competency in this school is 80. So, the researcher wants to solve this problem by examining a reading strategy that is chosen.

Second, most of the students do not understand the text that they read and do not know the strategies, stress and tired in reading comprehension. They do not have tricks to make them easier, read without pencil in hand, highlighting, jotting notes, and marking key vocabularies. So, they do not know how to improve their comprehension in reading, such as; reading assignment with same ways, unable to analyze the purpose, unable to adjust their speed to suit their purpose and unable to make questions in their mind.

Next, the students are lack of vocabulary and motivation in reading, seldom to practice, and lack of attention about the important of reading. They just read a text, and they accept what is in print directly without compare and connect what they are reading with what they have known. So, before reading, they do not find out what the assignment about, and check the length of an assignment before reading and read until the assignment is completed only.

Continuously, they also can not make the inference of the text and do not know what the text talk about. So they comprehend the text well. Then, reading becomes the burden of their life. Besides, many students accept everything they

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[3]LisdaHairani, S. Pd. I., *English Teacher at MTs N 2 Padangsidimpuan.*

read at face value, they seldom sit back and examine the authors' ideas, sources, evidences, or choice of words with critical eyes.

To solve the problems in reading, there are some alternatives of reading strategies that are available and applicable. As researcher know, there are many techniques and many strategies that can solve students' problem in reading comprehension, and also could increase the students' ability in reading comprehension, such as skimming, scanning, and P2R (Preview Read Review).

Skimming is a strategy that can help the students to read faster. In addition skimming is a reading strategy to take the point of something in reading. Meanwhile scanning is a reading strategy to read the detail information faster. In another word, scanning is the ability to find or to locate specific information. These strategies are useful in speed reading or reading faster. So, by using both of them, the students can read fast, but lack of comprehension of all the text. It means that not all the content of the text can comprehend well because these strategies emphasize in an important things.

From the problems that mention above, the researcher chose P2R reading strategies. It is caused that the suitable theories in this research that researcher found in the field are behavioristic and cognitive theory. Behavioristic theory assumptions that children attitude is the result of the experience with environment stimulus. Then, learning in association between ancient that can be observed, they

are stimulus and response.[4] Thus, this theory also said as stimulus and response theory. It is caused that by giving stimulus students can give response. Next, cognitive theory assumption that cognitive process creates a mental process to get the information from short-term memory to the long-term memory; new information will be saved in short-term memory, then repeating information and finally the information will be saved in long-term memory.[5]

Based on cognitive theory, learning can happen from students' thinking and should be active in processing the information.[6] Then, based on cognitive theory learning strategy gives good effect in arranging the information; the students can use their knowledge based on their scheme. One of applications of cognitive theory in learning strategy is: advance organizer, reading heading, and outlines to guide the students in processing information. It is introduced by David Ausubel.[7] Cognitive theory has philosophy; it is *the way in which we learn.* It means that knowledge of someone is based on thought.[8]

So, based on the explanation of behavioristic and cognitive theory can effect P2R (Preview, Read, and Review) strategy to achieve reading comprehension. It is caused P2R strategy is a strategy in teaching learning

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[4]Jeanne Ellis Ormrod. *PsikologiPendidikan.* Translated byWahyuIndianti from"Psychology of Education" (Jakarta: Erlangga, 2008), p. 422-423.

[5]Sharon E. Smaldino, et. al., *TeknologiPembelajarandan Media untukBelajar,* translated from "Instructional Technology and Media for Learning, Ninth Edition", by ArifRahman, (Jakarta: Kencana, 2012), p. 53-55.

[6]*Ibid.,*

[7]*Ibid.,*

[8]M. Sukardo and UkimKomaruddin, *LandasanPendidikan, KonsepdanAplikasinya,* (Jakarta: PT. Raja GrafindoPersada, 2010), p. 50.

process. Thus, the stimulus that gives to the students as a behavioristic theory and response includes in behavioristic and cognitive theory. Further, the cognitive theory impresses the mind process in memory.

Based on the explanations above, the researcher feels interested to do the research about this problem and choses P2R (Preview, Read and Review) strategy, and it gives some reasons about this strategy. First, students' learning materials are text books which contain a lot of passages. The passage consists of some paragraphs that contains and builds some ideas and information. Naturally, a text consists of one topic that containsmuch important information that readers must know. Conceptually, P2R is designed to identify all of important information from the text that readers read.

Further, P2R is a strategy to comprehend the text. It has three steps, Preview, it means to activate background knowledge and relate it to the text. Read the text actively. Review, it means that read all the contents of the text to answer the question or make the deep comprehension. So, read many times is better than read once, it is very important to us, mainly read the text of English, especially for beginner level, because P2R strategy is Designed for the easy to average materials. So, the students must read two times or three times so that they comprehend the passage or text.

In Holy book, Allah said, in Surah Al-Muzzammil verse 4:[9]

$$ تَرْتِيلًا ٱلْقُرْءَانَ وَرَتِّلِ عَلَيْهِ زِدْ أَوْ $$

The meaning: "Or a little more, and recite the Qur'an (aloud) in a
slow, (pleasant tone and) style."

Based on Al-Qur'an surah Al-Muzzammil verse 4, researcher can
conclude that when we are reading, we must take care about the text that we read,
concentrate and focus. So that, it can be concluded that read Al-Qur'an makes
heart to be calm and peace. Moreover, it can be more comprehending, and also in
reading all books, especially English, the readers must take care with the structure
of the text, and the relation or link of the text that they read, so that, they can easy
to comprehend the text or passage.

Next, by the three steps, preview, read and review, the readers must read
all the text carefully without passing one word to another word. It means that the
reader must analyze word by word. Finally, many researchers have done research
about P2R strategy, and this P2R strategy has been proven as an efficient strategy
in reading comprehension. Moreover, the theory that will be used in this research
is P2R strategy. This theory has been created by Diana L. Van Blerkom.[10] It
provides a mechanism for increasing understanding and memory in Reading
Comprehension. Based on the metacognitive theory, this learning strategy refers

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[9]*Ibid.,*p. 793.
[10]Diana L. Van Blerkom. *Taking Charge of Your Learning A Guide to College Success*(Boston: Wadsworth/Thomson, 2008), p. 116.

to the behavior and mind process that is used by the students which influence to their learning, include memory and metacognitive process. This is the theory that would be examined by the researcher for hypothesis in this research.

Based on the illustration above, the researcher is interested in conducting experimental research with the purpose to solve student's problem in reading comprehension by the title **"The Effect of P2R (Preview, Read, Review) Strategy on Students' Reading Comprehension at Grade VIII MTs Negeri 2 Padangsidimpuan.**

B. Identification of the Problems

Based on the background above, there are many problems which often face by the readers while reading process. So, they often faced the difficult in comprehending the text. The problems concerning reading skill at MTs Negeri 2 Padangsidimpuanare:

First, based on an interview with the teacher, most of the students still get low grade with average 68; meanwhile the standard of English competency in this school is 80. Second, most of them do not understand the text that they read and do not know the strategies, stress and tired in reading comprehension. Besides that, they are lack of vocabulary and motivation in reading, seldom to practice, and lack of attention about the important of reading. Continuously, they also can notmake the inference of the text and do not know what the text talk about. So they can not comprehend the text well.

C. Limitation of the Problems

Based on the identification of the problems above, the research was limited to investigate the causal-effect relationship between P2R (Preview, Read, Review) strategy on students' reading comprehension of recount text at grade VIII MTs Negeri 2 Padangsidimpuan in 2013/2014 academic year.

D. Definition of Operational Variables

The terms uses in this research are as follows:

1. P2R (Preview, Read, Review) Strategy

   a. Preview –read fastly to know structure of the text, main idea, relevant, etc.

   b. Read – read as possible as you can, according to the aims and material reading.

   c. Review- read as fast as you can to encertain that there is not passing from text or to enstrong mains idea which must be remembered.[11]

   In summary, the P2R strategy is a systematic helpful way for students to comprehend the information that they read through preview, read and review.

2. Students' Reading comprehension: Reading is a transactional between a reader and writer. It is the process cognition, interpretation and perception of a written and printed material. Reading is a process of assimilation or reception

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[11]Van Blerkom, D.L, "Textbook Reading Systems" *http: fdf.edu / com*, retrieved on 27th October 2013.

in which the meaning on the page is absorbed by the mind.[12]From the explanation above, it can be concluded that Students' reading comprehension is the students' ability in understanding or mastering written material and the ability to interpret and evaluate their reading.

E. Formulation of the Problem

The formulation of the problem was "is there thesignificant effect of P2R (Preview, read, review) Strategy on Students' Reading Comprehension at Grade VIII MTs Negeri 2 Padangsidimpuan?"

F. Purpose of the Research

The purpose of this researchdetermined as follow:

1. To describe the students' reading comprehension by using P2R (Preview, Read, Review) Strategy at Grade VIII MTs Negeri 2 Padangsidimpuan.

2. To examine the effect of P2R (Preview, Read, Review)Strategy on students' reading comprehension at Grade VIII MTs Negeri 2 Padangsidimpuan.

G. Significances of the Research

The significances of this researchareexpected to be useful for some domains. First, for the Headmaster as a domain of measurement in teaching progress.Next, as an input to the teacher in teaching and learning process through P2R strategy at Grade VIII MTs Negeri 2 Padangsidimpuan. It will give the information to the teacher about their students' reading comprehension. It is also

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[12]PremLata Sharma. *The Concept of Developmental Teaching* (New Delhi: Srup& Sons. 2005), p. 179.

expected to be useful to the students to decrease their problems in reading comprehension. Then, as an input or reference for the readers especially the English learners that is expected to be able to improve their knowledge especially in reading comprehension. Finally, this research is hoped to help the other researcher who will conduct further research in the same topic.

H. Outline of Thesis

The systematic of this research is divided in to five chapters. Each chapter consists of some sub chapters with detail as follow:

Chapter I discussed of Introduction; consisted of background of the problem, identification of the problem, limitation of the problem, formulation of the problem, purpose of the research,definition operational variables, and significances of the research.

Chapter II contained about theoretical description with some sub theory about P2R (preview, Read, review) strategy, reading comprehension, related findings, conceptual framework and hypothesis.

Chapter III was about methodology of the research that consisted of place and schedule of the research, research design, population and sample, the instrument of collecting the data, technique of collecting the data and technique of data analysis.

Chapter IV was the result of the research; data analyzing that consist of description of the data, discussion of the research and threats of the research.

Chapter V was about the conclusion and suggestion.

CHAPTER II

THEORETICAL DESCRIPTION

A. Theoretical Description

1. P2R (Preview, Read, Review) Strategy

a. The Background of P2R (Preview, Read, Review) Strategy

In teaching and learning process, a strategy is one of the very important components to make learning easier. A strategy is a plan of action designed to achieve a long-term or overall aim.[1] In addition, Strategy means a plan method of series of activities designed to achieve a particular education goal.[2] Moreover Strategy is necessary for developing communicative ability. Additionally, learning strategy depend on students' behavior and students' thinking process that used in finishing the tasks.

Sliberman stated that in application of learning strategy is classified in three parts, they are:[3]

1) How to help students actively

2) How to help students to get the knowledge, ability, and skill, such as, classroom strategy, discussion, collaboration, and *Pair* teaching.

3) How to make the learning to be unforgettable.

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[1]Definition of English Strategy, (*http//:oxforddictionary.com./definition/English/strategy*) retrieved on Sunday 11th May 2014 at 02.00 p.m.

[2]WinaSanjaya, *StrategiPembelajaranBerorientasiStandar Proses Pendidikan,*(Jakarta: KencanaPrenada Media Group, 2006), p. 124.

[3]Trianto, *Mendesain Model PembelajaranInovatif-ProgresifKonsep, Konsep, LandasandanimplementasinyaPadaKurikulumTingkatSatuanPendidikan (KTSP),* (Jakarta: KencanaPrenada Media Group. 2009), p. 138.

Generally, learning strategy relate with the learning theory. Based on the finding in the field, cognitive theory is suitable with learning strategy especially P2R strategy. Cognitive theoryassumptions that learning can happen from students' thinking and should be active in processing the information.[4] It concludes, the processing of information occur in memory.

Based on cognitive theory and process of information, there are four learning strategies that can be used and taught in the classroom; Rehearsal Strategy, Elaboration Strategy, Organization Strategy and Metacognitive Strategy. This is a strategy that has relationship with students' knowledge about their thinking and their ability in using learning strategy correctly.

Further, P2R (Preview, Read, review) strategy is a reading Comprehension strategy.[5] It provides a mechanism for increasing understanding and memory in Reading Comprehension. It consists of three steps; Preview, read, review. D. L van Blerkom[6] said that P2R is also one of the reading study systems that can make the readers become an active reader. The reader can read more actively by highlighting in a

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[4]*Ibid.*
[5]Diana L. Van Blerkom. *Taking Charge of Your Learnin*g *A Guide to College Success*(Boston: Wadsworth/Thomson, 2008), p. 116.
[6]Diana L Van Blerkom.*Op.Cit*, p.115.

thoughtful way, by taking notes, or by writing questions about the material in the margin of the text.

Then, the readers use this system to monitor and improve comprehension. Continuously, the readers need to pause frequently to reflect on what they have read and check to make sure to understand the material. They can monitor comprehension by stopping every so often (at the end of a paragraph, headed section, or page) and asking their selves what they just read and whether understood it; When they do have a problem with comprehension, when comprehension breaks down reader need do something to correct the problem. It means that they may have to go back and reread a portion of the material. The last, it is used in preparing text for later review.

Based on explanation above, the relationship between cognitive theory and P2R strategy is thinking process. So, thinking process of the information that the students get in reading will be transferred from short-term memory to the long-term memory and the students can organize the information based on their own sentences. Therefore,P2R (Preview, read, Review) strategy is an effective and efficient strategy for reading comprehension.

b. **The Component of P2R (Preview, Read, Review) Strategy**

The P2R reading/study system is designed for textbooks that are from easy to average level in difficulty.[7] P2R strategy is a reading strategy consisted of three steps, preview, read and review that are usually used for efficient and reading faster. This strategy can use in reading comprehension. Moreover, this strategy is very simple. The componentsof P2R strategy are:

1) Preview

Preview means read the text faster or scan the text. It is used to know the reading structure, main ideas, relevance; and the others. It is a first step that used in this strategy. In this step, the reader makes an introduction and activates background knowledge about the topic and main ideas in the text that they read. So, they can make the decision about the text. Is it important to read or not. It is depend on their need.[8] A previewis a brief overview of a chapter done before reading. Preview take very little time and effort that most of the students can do it in two to five minutes.[9]

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[7]Diana L Van Blerkom. *College Study Skill Becoming a Strategic Learner,* (Belmont, CA: Thomson Wadsworth. 2000), p. 174.

[8]Gotdon Wainwright. *Read Faster, Recall More; Use Proven Techniques for Speed reading and Maximum Recall.*Translated by HeruSutrisno.*Speed reading better recalling; MemanfaatkanTeknik-TeknikTerujiUntukmembacaLebihCepatdanMengingatSecaraMaksimal,*(Jakarta: PT GramediaPustaka, 2006), p. 43.

[9]Diana L. Van Blerkom. *Loc. Cit.,*

Janette stated thatthe purposes of previewing are:[10]

    a) Help the students identify what the text is about

    b) Tap into their prior knowledge about the topic

    c) Generate interest in the topic

Preview as same as the survey. On the other hand, it is like pre-reading. Pre-reading involves looking only at those parts of the reading material that will tell you what is about or how it is organized. Preview or pre-reading has the portions to look at in reading:[11]

    a) Read the title

    b) Read the introduction or opening paragraph

    c) Read each boldface headings

    d) Read the first sentence under each headings

    e) Notice any Typographical aids

    f) Notice any graphs or pictures

    g) Read the last paragraph or summary

2) Read

The second step of P2R is active reading in small chunks. This includes marking your text with highlights or margin notes. One way you can become an active reader is by marking your text. After

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[10]Janette K. Klingner Sharon Vaughn Alison Boardman.*Teaching Reading Comprehension to Students with Learning Difficulties*, (New York: The Guilford Press, 2007), p. 145.

[11]Kathelen T. McWhorter. *Efficient and Flexible Reading Third Edition*, (New York: HarperCollins Publisher, 1992), p. 25-26.

you have read a paragraph or headed section of text, pause to think about what you've read.[12]

Active reading is a process of thinking, predicting, connecting, and assessing performance. Active readers get involved with the material they are reading. They think, question, challenge, and criticize the author's ideas, and try to make the material their material.

Next, Highlighting is one method of marking the text in while reading. Read a section of text, then, pause to reflect on what you just read. By highlighting the text, you're actively involved in thinking about the material, and you're condensing what you'll need to review at a later time. There are some reason of marking text; promotes active reading, condenses the material and also improves comprehension.

Previously, note taking is another method of text marking, and there are different ways to accomplish this. One, the readers can write a heading in a notebook and then jot important details below it. Another way is to write recall words or questions in the margin of the text. Finally, you may want to write brief summary statements.

Then, Reading the text actively is to read as fast as possible based on the need and level of difficulties. It means that the readers must give the reaction or response to what is being read.[13]

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[12]Van Blerkom, D. L. *College study skills: Becoming a strategic learner*, *Op. Cit.,* p. 176-177.

There are some successful active reading strategies:[14]

a) Read each assignment differently

b) Analyze the purpose of an assignment

c) Adjust their speed to suit their purpose

d) Question ideas

e) Compare and connect text book readings with lecture content

f) Find out what an assignment is about before reading

g) Keep track of their level of comprehension and concentration

h) Read with pencil in hand, highlighting, jotting notes, and marking key vocabulary.

The general purpose of reading is to get the information. So if the reader wants to know the main part of the text, the reader can skim or scan the text, but if the reader wants to know all the material in the text, the reader must read all the text fast.

3) Review

Review means re-read fast. It is used to ensure and to strong memory of what have been read. In this step, the reader just read as their need. It is used to get the deep understanding and comprehending

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[13]Trianto.*Op. Cit.,* p. 152.
[14]Kathelen T. McWhorter. *Op.Cit.,*p. 24.

of the text. In another word, the information on text is well understood by the readers. So, review is also checking and evaluating the comprehension and a deeper analysis of the text.

After reading a text, you will review important information. There are many ways that you can review the material. One way is to summarize key points by writing three or four statements that you think summarize the main points of that section. Another way involves reciting the information. You can use the headings as a guide to try to recite the key points under each heading or you could recite notes that you wrote in the book.[15]

There are some ways to review the text. Diana L Van Blerkom stated:[16]

a) Remark your text; one of the most common ways to review text is to reread the highlighted information. To get more actively involved, you can remark your text. You can remark your text by using a different colored marker, by underlining, or by putting a bracket around the material you want to review again.

b) Take notes; another good way to review your text material is to take notes on the highlighted material. You could annotate the text by noting the main points in the margin directly across

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[15]Diana L Van Blerkom. *Taking Charge of Your learning.Loc. Cit.*
[16]Diana L Van Blerkom. *College Study Skill. Op. Cit.,*p. 206.

from the each of points. You could also move outside the text and take notes on notebook paper, on index cards, or on a computer.

c) Recite from the headings; by reciting the material from memory, you're practicing connecting the information to the heading and are thereby creating a cue to use. In the process of the reciting, you will probably find that you put a lot of information in your own words; you want just recite it word or word. This active review also helps you better understand and learn the material.

d) Recite the Answer to your questions; recite the answer to the question from memory and then slide your first question. Recite the answer.

Based on the explanation above, the researcher concludes that readers can review text by using some steps, such as remark or underlining the important information by underlining the text, write some notes, make the information based on your own words and answer the question. These steps can be used in reviewing text based on the readers need

c. **Goals and The Advantages of P2R (preview, Read, Review) Strategy**

The P2R reading/study system is a very efficient system for dealing with text material. By previewing, reading actively, and reviewing

your text, you should be able to significantly increase your comprehension of the material. You may also find that it takes less time to read the chapter, increases interest, builds background to aid comprehension, and prepares your text for later review. There are many advantages to the P2R reading strategy:[17]

1) Builds background. Preview; the goal of this step is to get an overview of the material and develop a sense of the progression of ideas Previewing gives you an overview of what the chapter is about, but it also helps to build some background on topics that may not be familiar to you. The preview can also remind you of information that you already know and it can help you access your long-term memory and "make accessible" information related to the new topics that you will be reading about. That can help you understand the material more easily.

2) Increases Comprehension. Even a 2- to 5-minute preview can help you understand your text better. Previewing can increase comprehension 10 to 20 percent. By using an active strategy to read the chapter, you also can improve your comprehension. The more involved you are with the material, the better you will understand it. When you highlight, you have to actually think about the material and you have to decide what's important and what is not. Finally, using active

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[17]Diana L Van Blerkom. *Taking Charge of Your learning.Loc. Cit.*

strategies as you read, take notes, or generate questions on the material, to pay attention to it and focus on the information increase your concentration.

3) Increases interest and motivation. Although you may originally have felt the chapter would be uninteresting and rather boring, you might find during the preview that there are some topics that do seem interesting. When you are more interested in the material, you'll be more motivated to read and pay attention to the material. Using an active strategy can also increase your interest in and motivation toward the task. If you aren't very interested in the material but like taking notes, for example, knowing that you will be taking notes can increase your interest in reading the assignment.

4) Prepares your text for later review. As you highlight or take notes, you're preparing your text for later review. You're identifying the important information and condensing it so that you can study more effectively for your exams. When you create word cards as you read or generate questions in the margin of the text or in the margin of the notes you take, you are preparing study aids in the form of self-tests that you can use to prepare for exams.

5) Monitors your learning. Reviewing the material after reading gives you an opportunity to reinforce the important information and monitor your comprehension and memory of it. As you read, you often focus

on only one piece of information at a time; however, as you review you can see how the information in the text is connected. Reviewing the material after reading also provides you with opportunities to test the understanding and memory.

d. The Procedure of P2R (preview, Read, Review) Strategy

Basically, the procedure of the P2R (Preview, Read,Review) strategy Study System are:[18]

1) Preview the chapter. Previewing takes only 2 to 5 minutes, but actually reduces the total time. It takes to read the chapter, to preview, read the title of the text, read the introduction, as you quickly turn to the next paragraph, read the headings and sub heading and subheadings; the first paragraph, glance at graphics and pictures; and finally, read the summary. The goal of this step is to get an overview of the material and develop a sense of the progression of ideas and structure of the text.

2) Read actively. The second step in the P2R system is to read actively to do something while you read. Most students tend to highlight the text or take notes as they read. Students may also find it helpful to annotate the text by making notes or summarizing information in the margin. If the text is easy to understand, the reader may find that highlighting the material is sufficient. If the readers find that they understand the

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[18]*Ibid.,*p. 116.

material better by taking notes or generating questions, then do that, too.

3) Review.The final step in P2R is to review. The readers may decide to do a review after each paragraph, after completing the text, or both. There are many review strategies you can use. You could take notes if you highlighted as you read, you could write questions in your text or notes to review, or if you already wrote your questions, you could review by reciting the answers. You can also do this in a number of ways: 1) summarize in your own words the author's main points; 2) write down three or four sentences summarizing what you've read; 3) close the book and recite the key information under each heading; 4) quiz yourself on questions or problems at the end of the chapter; 5) create questions you may see on the exam about this material and answer them.

e. **Application of P2R Strategy in Teaching Reading Comprehension**

Basically, there are some ways to apply P2R strategy in teaching reading comprehension in the classroom. Look the table below:[19]

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[19]IshmatulMaula."PeningkatanKeterampilanMembacaCepatUntukMenemukan Ide pokokMenggunakanMetode P2R dan Question denganpola horizontal PadaSiswaKelas X.1 MA SalafiahSimbangkulonBuaranPekalonganTahunPelajaran 2012/2013" *http://lib.unnes.ac.id/18347//*)retrieved on Sunday 11th May 2014 at 6.00 p.m.

Table I
Steps of Applying P2R Strategy

Steps	Teacher Activity	Student Activity
Step 1 Preview	1) Giving student a text 2) Giving student a direction and information to find the main idea and the purpose	1) Read the title, section headings and visual aids 2) Read the first and the last paragraph to get general idea of the purpose and the major concept
Step 2 Read	1) Asking student to answer the question	1) Read a text in its entirely 2) Carefully read the complete text, recording notes in the margin or underlining important information that answer the question
Step 3 Review	1) Asking students to check their work and summary 2) Asking students to reread the text if they are not sure with the answer	1) Highlight key points of the text 2) Make sure the question have been answered and the purpose fully 3) Submitting the work

Table II
Teaching Reading Comprehension by Using P2R Strategy

No	Teaching Activity	Activities
1.	A. Opening 1. Telling the learning purpose 2. Giving apperception about learning material with student knowledge 3. Inform the purpose of the learning	1. Coordinate the students 2. In teaching reading comprehension process, teacher must give information about learning purpose orally 3. Review the last material that relevant with the material that will be explained

	4. Inform the main parts of the learning	4.	Teacher gives students a motivation using visual phenomena. For instance, if teacher learn reading text, teacher must give students the text that will be read.
		5.	Inform the purpose and main parts of the text material.
2.	B. Main Activity 1. Presenting material	1.	Before teaching learning process, presenting little bit general description about the material will be learnt
	2. Modeling of P2R strategy	2.	Teacher performs P2R strategy step by step by using material from the text. Students follow the teachers' direction apply P2R strategy
	3. Feedback	3.	In the feedback, teacher gives some questions for students that they must be answer
	4. Giving independent tasks	4.	Teachers gives independent tasks for students to read main points from the text by using P2r strategy
3.	C. Closing 1. Evaluation	1.	Teacher together with students evaluate learning material with reading the conclusion which they are made from the text
	2. Notes	2.	The notes are: a. Teacher must make teaching learning be interesting b. In applying the steps of P2R strategy, teacher should give time allocation c. Teacher must uses the word that can be understand by students d. Teacher must direct students when they do the task

2. Conventional Strategy

Conventional strategy is the strategy or the way that usually used by the teachers to teach the text to students.[20] According to Hudson that conventional strategy is the strategy used by the teachers based on mutual agreement in a school.[21] In addition, it uses the traditional way in teaching and learning process. The researcher concluded that conventional strategy is the way that is used by the teachers in teaching a material based on the agreement of the teacher at school.

Based on the explanation above, the researcher concludes that the procedure used by the English teachers at MTs Negeri 2 Padangsidimpuan, are as follows:

a. Explain the subject matter

b. Identify the difficult words

c. Ordering the student translate at home

d. Answering the questions

3. Reading Comprehension

a. Definition of Reading Comprehension

Many experts give the definition of reading. According to Douglas Brown "Reading is a process negotiating meaning; the reader

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[20]JhonDeriden. *Conventional Strategy (http://www.britannia.com/EBchecked/topic/421797/n nuclear-strategy/52993/conventional-strategy),* retrieved on January 17, 2014 at 08.00 p.m.

[21]Hudson. *The meaning of Conventional Strategy* (http://www.conventional-strategy/topic/ 54372-strategy), retrieved on January 17, 2014 at 08.00 p.m.

brings to the text a set of schemata for understanding it, and it's takes the product of that interaction". Besides, reading is process of readers combining information from a text and their own background knowledge to build meaning and has the goals to comprehend. Then, reading is not just saying the words; reading must always be a meaning getting process.[22]

In addition, Marilyn stated "Reading is one of the principal means of obtaining information. The information may be in printed form, such us a book magazine, or in electronic form on a computer screen. Reading is an efficient way to learn because it allows you to control the flow of information".[23]

Furthermore, reading is a complex process that involved the features of parts of success ability and failure, after reading, readers should able to remember the information of the text that they have read. To know the contribution of readers' mind remembering the information depends on the factors that affect them while reading process.

Then, Reading is a receptive skill, it is transactional between a reader and writer, reading is an interactive process between a reader and the text. As a result a writer can communicate with a reader through a text,

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[22]Douglas Brown. *Language Assessment Principles and Classroom Practice* (USA: Longman, 2004), p. 189.

[23]Sue C. Camp. Marilyn L. Satterwhite, *Collage and English Communication* (New York: McGreen- Hill, 2003), p. 68.

and also reading is an interactive process between the reader and text. An interactive process happens when reader try to comprehend the text, while understanding the text, the readers want to communicate with ideas proposed by the writers. Therefore, reading is the process of communication between the readers and the writer.

David Nunan Stated "Reading is a fluent process of readers combining information from a text and their own background knowledge to build meaning".[24] Reading is the readers' activities to get meaning or message from an author. An author tells the meaning or massage to reader in printed or written material.[25]On the other hand, it is a process where an author combines words in a unity that has meaning. If an author cannot build a complex meaning in a text, the reader will not understand what the text tell about.

Finally, reading is the process of cognition, interpretation and perception of a written or printed material. Reading is fluent process of readers combining information from a text and their own background knowledge to build meaning. So, reading is an interactive process that happens in human minds to reconstruct the meaning for what they have read and then, bringing meaning to and getting meaning from printed or

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

[25]Henry Guntur Tarigan, *MembacaSebagaiSebuahKeterampilanBerbahasa* (Bandung: Agkasa, 2005), p. 6.

written material. Reading to learn also involves complex thinking skills in which students must be able to make material their own through activities which guide them into analyzing texts. Such as summarizing passage and chapters, picking out main ideas, and building them into an outline.[26]

So, reading is not just saying the words, but also reading must always be getting process. After reading, readers should able to remember and to comprehend the information of the text that is read. Then, reading is a complex process that done by the readers to get the meaning and comprehend the written text by physical and mental aspects by two steps; reading process and the result.

Next, comprehension is the ability to understand. Richard stated that "Comprehension is the process by which a person understanding the meaning of written or spoken language clearly".[27]Then, according to Webster's Dictionary Comprehension is the act of grasping with the mind, understanding or knowledge, the capacity for understanding ideas, facts".[28]So, comprehension is understanding of written or spoken material.

Further David said that "Comprehension is essential to succeed the reading, for succeeding the comprehending, the reader must use cognitive and meta cognitive skills, cognition can be defined as thinking

[26]Marianne Celce-Murcia. *Teaching English as A second or Foreign Language* (Los Angeles: Newbury House. 1991), p. 200.

[27]Richard A.Renandya, *Language Teaching Methodology* (Cambridge university, 2006), p. 54.

[28]Victoria New feldt, *Webster's New World College Dictionary* (USA: Macmillan, 1991), p. 286.

and meta cognitive skills".[29]So, To comprehend text, the reader must be able to decode words or recognize words and access text integration processes to construct meaning and retain the content of the words long enough for it to stimulate their stores of related information in their long term memories Beginning comprehension instruction builds on children's linguistic and conceptual knowledge and include explicit instruction on strategies such as summarizing, predicting, and self-monitoring for understanding.

In summary, Comprehension means the ability to understand the language. Additionally, comprehension is an understanding spoken or printed material or language through some alternation.

So, reading comprehension is understanding and getting the meaning from the text by interactive communication with the author though by physical and mental process. Thorndike,[30] equates reading comprehension with verbal reasoning. Efforts to increase comprehension should concentrate on improving thinking abilities and should not attempt to deal with hypothesizes separate sub skills that research has fail to validate. One advantage of viewing comprehension as a whole is expressed by the Beery when the stresses that skills are not used in

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[29]David Nunan, *Op. Cit.,* p. 67.
[30]*Ibid.,*p. 151.

isolation but in combination. A reader not just read to get the main idea or to read detail question.

Reading comprehension is dependent on three factors. The first factor is that the reader has command of the linguistic structures of the text. The second factor is that the reader is able to exercise metacognitive control over the content being read. This means that the reader is able to monitor and reflect on his or her own level of understanding while reading the material. The third and most important criterion influencing comprehension is that the reader has adequate background in the content and vocabulary being presented.[31]

So, Reading comprehension means the ability to interpret and evaluate what readers read and to understand of written or printed material. In addition, Reading comprehension is the ability to understand information presented in written form. Reading comprehension is mental process in which the readers try to understand the meaning in the text by interpreting what have been read in order to find the new idea that given by the writers.

[31]Karen Tankersley. *The Threads of Reading; Strategies for Literacy Development.*(USA: ASCD. 2003), p. 90.

b. **The Reading Goals**

The main goals of reading are to get and find information include content and meaning of the text based on the purpose.[32]Tarigan stated that, Here some goals of reading such as:

a. Reading is for identifying important information.

b. Reading is for main ideas.

c. Reading is for finding the specific information.

d. Reading is for underlining the important information.

e. Reading is to classify the difficult word.

f. Reading is to evaluate.

g. Reading is to compare or contrast.

Based on the list above, the researcher makes an inference that reading has some goals that refer to general point of understanding and comprehending.

c. **Aspects of Reading**

Reading aspect is the reading skills that based on the purpose and the reader needed. There are two aspects in reading, they are:

1) Mechanical skill is the lower order. It is included: Knowing the letter Mechanical skills in the lower order and it's include: letters recognition, linguistics recognition (words, phrase, sentences,

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[32]Henry Guntur Tarigan, *Op. Cit.*, p. 9.

phoneme, and clause roles), pronunciations recognition, and the speed reading.

2) Comprehension skill in the higher order, this aspect includes comprehending in the simple definition, understanding significance or meaning evaluation of speed flexible reading.[33]

d. Types of Reading

In the case of reading, these several types of reading performance are typically identified:[34]

a. Perceptive. Perceptive reading tasks involve attending to the components of larger stretches of discourse letters, words, punctuation and other graphemic symbols.

b. Selective. 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.

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

d. Extensive. According to Carrel and Carson extensive reading generally involves rapid reading of large quantities of material or longer

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[33]Henry Guntur Tarigan, *Op. Cit.,* p. 7-8
[34]H. Douglas Brown. *Op. Cit.,* p.189.

reading. For general understanding, the focus generally on the meaning of what is being read than on the language.[35] Extensive reading applies of the to a text more than a page, up to including professional articles, essays, technical reports, short stories and books.

e. Kinds of Reading

1) Silent Reading

According to David Nunan, silent reading generally focus in the classroom should be on getting the meaning from print when comparison is the goal of reading.[36] Then, according to Oxford dictionary "Silent is condition of not speaking and a sound track".[37]

So, silent reading is reading by heart or without sounds to get the deep understanding of the material. Reading silently improves students' understanding because it helps them concentrate on what they are reading, rather than the pronunciation of individual words. When we read silently, we can form mental pictures of the topic being discussed. Also, we do not need to read one word at a time. Encouraging the students to read silently will help them develop the strategies they need for reading fast, and with better comprehension.

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[35]Jack C. Richads, and Willy A Renandya. Methodology in Language Teaching an Anthology of Current Practice. (United kingdom: Cambridge University Press 2002), p.295-296.
[36]David Nunan, *Practical English Language Teaching. Op. Cit.,* p. 69.
[37]AS. Hornby, *Op. Cit.,* p. 887.

This is called reading efficiency, and it will help the students to read any text with maximum attention to meaning.

2) Loud Reading

Reading out loud may sometimes have meaning beyond the oral transmission of text in that it gives insight into current concerns or interests of the reader. [38]According to H. Douglas Brown, "loud reading is the test – taker separate letters, word, and or short sentences and read them loud, one by one, in the presence of an administrator since the easement is reading comprehension, any recognizable oral approximation of the target response is considered correct". [39]

Tarigan said "Loud reading is activity to read, using voice with the correct intonation, so the listener and reader can get information like thinking, feeling, attitude, or writer's experience.[40]

So, it concludes that loud reading is read orally or with voice by using correct pronunciation to express the content of the material or text, so the reader and listener can get the information or the authors' messages from the text.

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[38]Nicola S. Schute and JhonM.Malouff.*Why We Read and How Reading Transform* (University of South America: Emerutus. 2006), p. 51.
[39]H. Douglas Brown,.*Op. Cit*, p. 190.
[40]Henry Guntur Tarigan, *Op. Cit.,* p. 22.

f. Micro and Macro Skills for Reading Comprehension

There are two skills for reading comprehension. Micro and Macro skills with the detail parts:[41]

1) Micro Skills

There are micro skills for reading comprehension:

a) Discriminate among the distinctive graphemes and orthographic patterns of English.

b) Retain chunks of language of different lengths in short term memory.

c) Process writing at an efficient rate of speed to suit the purpose.

d) Recognize a core of words and interpret word order patterns and their significance.

e) Recognize grammatical word classes (Noun, Verb, etc.), systems (e.g., tense, agreement, and pluralization), patterns, rules, and elliptical forms.

f) Recognize cohesive devices in written discourse and their role in signaling the relationship between and among the clauses.

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[41]*Op. Cit.,* p. 187-188.

2) Macro Skills

Macro skills for reading comprehension are:[42]

a) Recognize the rhetorical forms of written discourse and their significance for interpretation.

b) Recognize the communicative functions of written text according to form and purpose.

c) Infer context that is not explicit by using background knowledge

d) From events, ideas, etc., described, infer links and connections between events deduce causes and effects, and detect such relation as main idea, supporting idea, new information, given information, generalization and exemplification.

e) Distinguish between literal and implied meanings.

f) Detect culturally specific reference and interpret them in a context of the appropriate cultural schemata.

g) Develop and use the battery of reading strategies, such as scanning and skimming, detecting discourse markers, guessing the meaning of words from context, and activating schemata for the interpretation of the texts.

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[42]*Ibid.,*p.191.

g. Strategies for Reading Comprehension

Reading comprehension strategies are tools that proficient readers use to solve the comprehension problems they encounter in texts.[43] There areseveralstrategiesforreadingcomprehensionthat should be knownby the reader. According to H. Douglas Brown, there are some principal strategies for reading comprehension:[44]

1) Identify your purpose in reading a text.

2) Use graphemic rules and pattern in bottom-up decoding

3) Use efficient silent reading techniques for relatively rapid comprehension.

4) Skim the text for main ideas

5) Scan the text for specific information

6) Use semantic mapping or clustering

7) Guess when you aren't certain

8) Analyze vocabulary

9) Distinguish between literal and implied meanings.

10) Capitalize on discourse markers to process relationship.

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[43]Judi Moreillon. *Collaborative Strategies For Reading Comprehension Maximizing Your Impact* (Chicago: American Library Association. 2007), p.10.

[44]H. Douglas Brown. *Teaching by Principles an Interactive Approach to Language Pedagogy the Second Edition* (California: Longman, 2000), p. 306 -310.

h. Reading Assessments

Assessments require planning and organization. The key lies in identifying the purpose of reading assessment and matching instructional activities to that purpose. Assessment is a tool to measure how far the students ability and comprehension of the material.[45] In assessing reading comprehension, there are some indicators:

NO	Indicators of Reading Comprehension
1.	Identifying Topic Sentence
2.	Identifying Main Idea
3.	Identifying Supporting Sentence
4.	Identifying Specific and Important Information
5.	Identifying Specific Vocabulary
6.	Identifying Conclusion

There are some techniques in assessing or testing, one of them is multiple choice questions. A multiple choice test item is usually set out in such a way that the candidate is required to select the answer from a number of given options. Only one of which is correct, the marking process is totally objective because the marker is not permitted to exercise judgment when marking the candidate's answer, agreement has already been reached as to the correct answer to each item.[46]

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[45]J. Michael O, Malley and Lorraine Valdez Pierce, *Authentic Assessment for English Language Learners* (United States of America: Addison-Wesley Publishing Company. 1996), p. 98.
[46]CyrillJ.Weir, *Communicative Language Testing* (New York: Prentice Hall, 1990), p. 43.

Cyrill[47] listed the Advantage and Disadvantage of multiple choice tests.

The advantage of multiple choices:

1. The marking, as being reliable is simple, more rapid and often more cost effective than other forms of written. The format of the multiple choice test item is such that the intention of the test compiler are clear than candidates know what is required of them.

2. In multiple-choice tests there is almost complete marker reliability. Candidates' marks, unlike those in subjective formats, cannot be affected by the personal judge of the marker.

3. In more open-ended formats, example short answer questions, the candidate has to deploy the skill of writing.

4. Because items can be pre-tested fairly easily, it is usually possible to estimate in advance the difficulty level of each item and that of the test as a whole.

Disadvantage of multiple choices:

1. The scores gained in multiple choice tests, as in true-false test, may be suspect because the candidate has guessed all or some of the answers.

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[47]*Ibid.,*

2. There isa number of problems associated with used of this format.

3. A further objection to use multiple choice formats is the danger of the format having an undue effect on measurement of the trait.

4. Multiple choice tests take much longer and are more expensive and difficult to prepare than essay test.[48]

4. **Concept of Recount Text**

Recount text is a text that retell event that happened in the past for informing or entertaining. According to AS.Hornby recount is to tell somebody about something, especially something that you have experienced."[49] Next, Pardiyono defines recount text as a kind of text that is aimed to inform about an event in the past.[50] It means that recount text is an event or activities happened in the past time.

From the explanation above, the researcher concludedthat recount text is a text that used to inform past event or experience that happened in the past. So, if the students want to tell their experience, they must be able to comprehend recount text.

[48]*Ibid.,*p. 50.

[49]AS.Hornby,*Oxford Advanced Learner's Dictionary of CurrentEnglish*, London: Casel, 2000), p. 1106.

[50]Pardiyono, *PastiBisa! Teaching Genre-Based Writing MetodeMengajarBerbasis Genre SecaraEfektif*(Yogyakarta: Andi, 2007), p. 63.

There are three types of Recount Text, as follow:[51]

1) Personal Recount; retelling of an activity that the writer/speaker has been personally involved in.

2) Factual Recount; recording the particulars of an incident

3) Imaginative Recount; taking on imaginary role and giving details of events.

The structural element of recount text consists oforientation, events and reorientation, and will be explained as follow:

1) Orientation

Orientation consists of opening, introduction the participant, time and the place. OtongSetiawanDjuharie says: "Orientation refers to part of the text which gives setting or introducing".[52] Formally, recounts are sequential texts that do little more than sequence a series of events. Every story, no matter how simple, needs an orientation. Indeed, it is impossible to tell a story unless we see that there are characters set up in a particular time and place, although many postmodern narratives play with these conventions.

Related to the above of explanation, theresearcher concluded that provides the setting of place, and time of the events and introduces

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[51]BaverlyDerewianka. *Exploring How Text Work*. (Australia: Primary English Teaching Association, 1946), p. 15.
[52]OtongSetiawanDjuhrie, *Genre* (Bandung: YramaWidya, 2007), p. 44.

the participants of recount text by giving question "who, where, and when".

2) Event

Event is a part of recount text that contains sequences of phenomenon or tells what happened in the story. And Gerot and Wignel stated, "Event tell what happened, in what sequence".[53] Event contains of recording of activities or events in the past that is told based on it chronological events".[54] So, event is all the activities or events chronologically in the past.

3) Re-orientation

Pardiyono said that re- orientation contains the brief conclusion of the record events.[55] By comprehending the quotations, the writer concludes both experts determine re- orientation as the conclusion of the text. It also can be determined as the ending of the events in the text or story.

The Language Features of Recount Text

1) Using Noun and Pronouns as specific Participant; I, we, they, he, she, my Family, Bandung.

2) Using simple past tense: went, took, arrived,

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[53]Linda Gerot and Peter Wignell, *Making Sense of Functional Grammar* (Australia: GerdStabler, 1994), p. 194.
[54]Pardiyono, *Loc. Cit.*
[55]*Ibid.,*

3) Using Action verb; went, looked, rid.

4) Using linking items to do with time; last holiday, then, after, next, later.

Example of Recount Text

MY HOLIDAY

Orientation

I went to Bandung last holiday with my family. We went there by my car. I took long time to reach Bandung. It was about 2 hours and we had so many traffics in Bandung. As people could see, Bandung is almost same like Jakarta, but the differences are in its culture. Not only that, Bandung also had so many cold areas like Ciater etc. It was so wonderful in Bandung. I could release all my things at there.

Event

After we arrived in Bandung city, we had a look in another place like ITB, UNPAD, TELKOM etc. Then we had a lunch in a small restaurant. After lunch, we continue our way to Ciater. Hopeless, it had a big traffic in the way to Ciater. So we stop in a café until evening. Then we continue our way. It was so dark and it was scary in the left or right side. Only trees that we could see because we were pick the way to the higher place. Finally we arrived in Ciater.

Event

Ciater was so cold and comfortable. It was nice and well-known as its sulfur bath. But although it was night and the temperature was cold, it still hot in the sulfur pool. Not only that, the sulfur bath was so skinny and we mustn't let our eyes touch the water. Sulfur is almost same like salt. It could make our eyes hurt. But the advantage of sulfur bath is we can make our skin became light and fresh. Then after I took bath, I went to sleep.

Event

The next day was my last day in Bandung, so I must spend it rightfully. The first thing that I do is riding a horse. It was nice to ride horse when the air was fresh and comfortable. After that, I went to strawberry garden. At there I know the process of harvest a strawberry. After that, I went back to the bungalows and packing. After we checked out, we went to a Sudanese restaurant to have a lunch. The food was delicious. After we had a lunch, we went to Cihampelas. This is the most

crowded place in Bandung because it was the last place that everyone visits before coming back to Jakarta. There were many shops and places to visit, like instrument shop, tattoos, etc. After having fun, we went home.

Re-orientation ⟨ It was a wonderful holiday because it was the first time I went to Bandung. Although it was pretty quick, it was wonderful to visit Bandung and make many friends.

B. Review of Related Findings

There were some related findings related to this research. The first wasLailaFebriani "The Effect of Skimming Strategy on Students' Achievement in Reading Comprehension at Grade XI SMKS Panca Dharma Padangsidimpuan". The concluding of her research, there was the effect of skimming strategy on the students' achievement in reading comprehension, where the effect was 01.88 a positive effect with the mean score 76.84. It implies that the students'score who were taught by using skimming strategy was better achievement in teaching reading comprehension.[56]

Next, ZahroMaitoPohan"The Effect of Predicting Information from the Pictures on Reading Comprehension at Grade VIII Junior High School Negeri 8 Padangsidimpuan. She concluded that there was the effect of Predicting Information from the pictures on reading Comprehension where the t_0 was 0.005=1.86 and the mean score was 73.93 and the control class 71.84. So, the

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[56]LailaFebriani.The Effect of Skimming Strategy on Students' Achievement in Reading Comprehensionat Grade XI SMKS Panca Dharma Padangsidimpuan. (*Unpublished Thesis*: STAIN Padangsidimpuan, 2013), p. 54.

implication of Predicting Information from the picture on students' reading comprehension was better that conventional.[57]

The last, Imam Setiawan "Improving Extensive Reading Comprehension Skill by Using P2R (Preview, Read, Review) Strategy to Find the Main Ideas at Grade VIII Junior High School Muhammadiyah Semarang in 2011/2012 academic year. The result of his research concluded that there was an improving of students' reading comprehension skill to find the main ideas by using P2R (Preview, Read, review) Strategy based on the cycles. It can be seen Based on the average sore in first cycle 63.86 and in the second cycle 77.5.[58]

In summary, from the description above, the researcher concluded that strategy or methods increased the students' reading comprehension. So, the researcher hoped that P2R (preview, read, review) Strategy could increase the student's reading comprehension and this research completed and contributed a previous findings. Moreover, the researcher wanted to research about "The Effect of P2R (preview, read, Review) Strategy on Student's Reading Comprehension at Grade VIII MTs Negeri 2 Padangsidimpuan.

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[57]ZahroMaitoPohan. The Effect of Predicting Information from the Pictures on reading Comprehension at Grade VIII Junior High School Negeri 8 Padangsidimpuan. (*Unpublished Thesis:* STAIN Padangsidimpuan, 2013), p. 47.

[58]Imam Setiawan. Improving of Extensive Reading Comprehension Skill by Using P2R (Preview, Read, Review) Strategy to find the main ideas at Grade VIII Junior High School Muhammadiyah Semarang in 2011/2012 academic years. (*Unpublished Thesis:* UNNES, 2012), p. 107.

C. Conceptual Framework

The successful of reading comprehension depended on many factors. One of them was how the teacher teaches reading to the students. The suitable strategy was very important to teach reading. Reading comprehension is to make the material owns. So, the students' must have the reading strategies. Reading strategy is the strategy that used while the students read the material. So, they can more easily to understand and comprehend the material. P2R (preview, read, review) Strategy is one of the reading strategy has the effect in reading comprehension. The relation of P2R (preview, read, review) strategy on reading comprehension can be seen as the diagram follow:

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┌──────────────────────────┐          ┌──────────────────────────────┐
│ Students' Problems in     │          │ The students have low grade  │
│ Reading Comprehension     │ ──────►  │ and they are difficult to    │
└──────────────────────────┘          │ comprehend the text also did │
                                       │ not know the reading         │
┌──────────────────────────┐          │ strategy when they are       │
│ Reading Comprehension     │          │ reading, lack of vocabulary, │
└──────────────────────────┘          │ and cannot inference the     │
            ▲                          │ text                         │
            │                          └──────────────────────────────┘
┌──────────────────────────┐                        │
│        RESULT             │                        ▼
└──────────────────────────┘          ┌──────────────────────────────┐
            ▲                          │ Using P2R (Preview, read,    │
            └──────────────────────────┤ Review) Strategy             │
                                       └──────────────────────────────┘
```
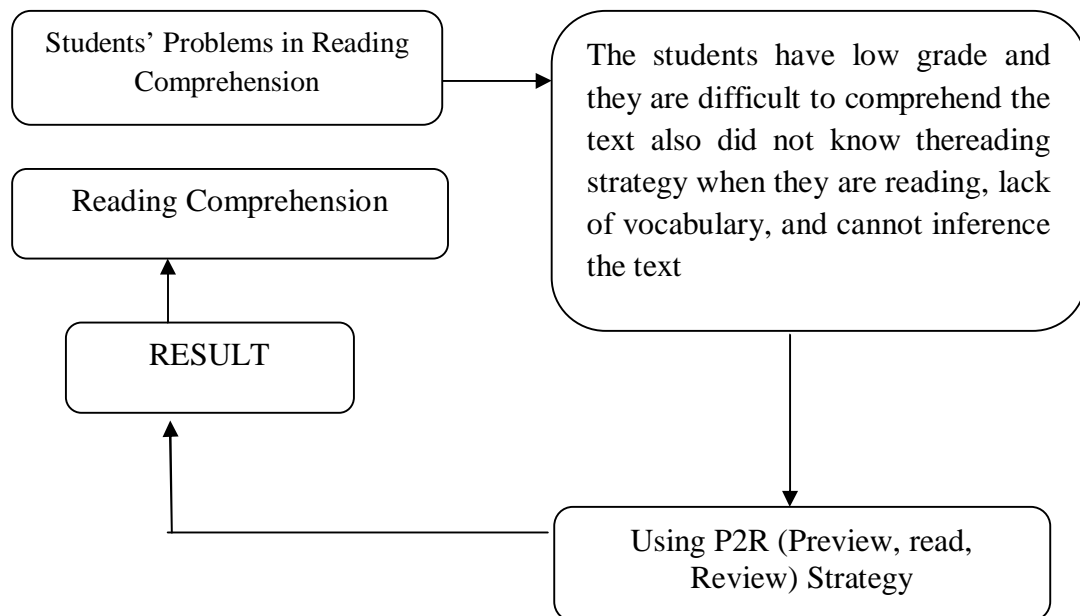
D. Hypothesis

Hypothesis is a provisional result of the research.[59]While according to L.R. Gay says, "A hypothesis is a tentative prediction result of the research findings."[60]So, the purpose of hypothesis is to answer a certain specific question. Based on formulation of the problem above, the hypothesis of the research are:

1. There is the significant effect of P2R (Preview, Read, Review) strategy on students' reading comprehension at grade VIII MTs Negeri 2 Padangsidimpuan".(H_a)

2. There is no significant effect of P2R (Preview, Read, Review) strategy on students' reading comprehension at grade VIII MTs Negeri 2 Padangsidimpuan". (H_0)

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[59]SuharsimiArikunto. *ProsedurPenelitianSuatuPendekatanPraktik* (Jakarta: RinekaCipta, 2006), p. 71.
[60]L. R Gay and Peter Airaisan. *Educational Research for Analysis and Application,* (America: Prentice Hall, 1992), p. 71.

CHAPTER III

RESEARCH METHODOLOGY

A. Place and Schedule of the Research

The location of this research is at MTs Negeri 2 PalopatPadangsidimpuan. It is located at H.T Rizal NurdinStreet 6.5 km, Padangsidimpuan of North Sumatera. The subject of this research is the second grade of students in MTs Negeri 2 Palopat Padangsidimpuan. The schedule of this research has been done from February 2014 up to August 2014.

B. Research Design

This research is conducted with quantitative research with experimental method. L. R Gay said, "Experimental research is the only type of research that can test hypothesis to establish cause and effect."[1] And then, Creswell says, "Experimental research included the experiment with the random assignment of subject to treatment condition as well as quasi experiment that use none randomized.[2]From the definition above, researcher concluded that the experiment is a kind of research that has aim to know the causal effect relationship between one or more variable to other variables.

In this research, the researcher uses two classes, as an experiment class and as a control class. The experiment class is the class that taught with P2R

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[1]L. R Gay and Peter Airasian. *Op. Cit.,* p. 367.
[2]Jhon Creswell. *Research Design Qualitative, Quantitative and Mixed Methods Approaches Second Edition* (USA: Prentice hall, 2000), p.14.

strategy, as a treatment. Meanwhile the control class is the class that taught with using conventional strategy or without treatment. It can be seen from the table:

Table III
Table of Design Instrument

Class		Treatment	
Experiment class	Pre-test	Teaching Recount Text by using P2R (preview, Read, Review) strategy	Post Test
Control class	Pre test	Teaching Recount Text by using Conventional Strategy	Post Test

C. Population and Sample

a. Population

According to Gay, population is the group of interest to the researcher, the group to which she or he would like the result of the study to be generalizable.[3]Meanwile, Suharsimi Arikunto says, "A population is a set (collection) of all elements processing one or more attributes of interest."[4]

So, the population in this research is the whole of the students at grade VIII MTs Negeri 2 Padangsidimpuan.

Based on the Quotation above, the research is done for the grade VIII students of MTs Negeri 2 Padangsidimpuan. The population of research consisted of 4 classes with 148 students. It can be seen from the table follow:

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[3]L. R. Gay and Peter Airasian. *Op. Cit.*, p. 122.
[4]SuharsimiArikunto. *Op. Cit.*, p. 108.

Table IV
The population of the grade VIII students of MTs Negeri 2
Padangsidimpuan

NO	Class	Total Student
1.	VIII-1	37
2.	VIII-2	37
3.	VIII-3	37
4.	VIII-4	37
Total of Student		148

b. **Sample**

According to Gay and Airasian, "Sample comprises the individuals, items, or events selected from a larger group referred to as a population." Then, Muhammad Ali stated that sample is partial taken from the whole subject and representative of the population. So, Sample is the part of population that is chosen as respondent of the research.

Experimental research decided to take two classes as a sample. They are experimental class and control class. So, the researcher takes two classes as sample. So that, one class is an experimental class and the other is control class.

In taking the sampling, the researcher uses random sampling. The researcher choses two classes. The tricks to use random sampling are using a lottery, ordinal, random number table or computer. But, before using random sampling, the writer uses normality and homogeneity test, theyare:

1) Normality Test

The function of normality test is to know whether the data of research is normal or not. There are some ways to test the normality of data. In this research, the researcher uses normality test with using *Chi-Quadrat* formula, as follow:[5]

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

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 in 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.Based on the calculation of normality test in pre- test, the researcher found that there are three classes that is classified normal with dk=5-3=2 = 5.991. They are VIII-1(1.30<5.991), VIII-2 (2.60<5.991), and VIII-4 (4.55<5.991), and there is a class that was not normal with dk= 6-3= 7.815, (VIII-3 = 9.45 >7.815).

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[5] AnasSudijono.*PengantarStatistikPendidikan.* (Jakarta: PT. Raja GrafindoPersada. 2005), p. 298.

2) Homogeneity Test

Homogeneity test is used to know whether control class and experimental class have the same variant or not. If both of classes are same, it can be called homogeneous. Homogeneity is the similarity of variance of the group will be compared. So, the function of homogeneity test is to find out whether the data homogeny or not. It uses Harley test, as follow:[6]

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

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

Hypothesis is rejected if $F \leq F\frac{1}{2}$ $a(n_1\text{-}1)$ ($1 = n_2\text{-}1$), while if $F_{count} >$ F_{table} hypothesis is accepted. It determined with significant level 5% (0, 05)= 1.697, and dk numerator is (n_1-1), while a dk denominator is (n_2-1).So, dk= (37-1)=36= 1.697. Based on the calculation of homogeneity test in pre-test, the researcher found that all of the classes are classified homogenous. (See appendix 18).

Based on explanation above, the population isthe four classes of the second year students, two classes are selected randomly in order to be an experimental or control class. After comparing the normality and homogeneity test of the four classes in pre-test, the researcher found that all the classes

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[6]AgusIrianto.*StatistikKonsepDasardanAplikasinya*(Padang: P2PLTK, 2003), p. 276.

arehomogenous and the normal classes are VIII-1, VIII-2, and VIII-4, and VIII-3 is not normal. So, the researcher concluded that VIII-1 and VIII-2 are the sample of this research. The researcher chose these classes because they have similar competence based on their result in pre-test. In this research, the experimental class is VIII-1 and control class is VIII- 2.The researcher chose VIII-1 consists of 37 students and VIII-2 consists of 37 students. Therefore, total of samples are 74 students.

Table V:
Sample of the Research

Experimental Class	Control Class	Total
VIII-1 = 37	VIII-2 = 37	74

D. Instrument of Collecting Data

A good instrument certify the validity of the data. The researcher uses instrument of validity and reliability for the taking the valid data. The research uses test as instrumentation. Test is some of question or view or other tool uses for measure skill, knowledge, intelligence and ability.

The researcher collected by giving the multiple-choice test. Cryil says, "A multiple-choice questions (MCQs) is the test item usually set out in such a way that the candidate is required to select the answer from a number of given options, only one of which is correct."[7]

In this research, the test consisted of 40 questions, where 20 for pre-test, and 20 for post-test by choosing an answer from the 4 options to prepare the

[7]*Ibid.*, p. 43.

students' reading comprehension. This test is given to both class, experiment and

control class. To find out the scores of the students' answer, the researcher gave 5

score for each item. Thus, the maximum score of test is 100.

Table VI

The Indicators of Reading Comprehension Pre-Test:

NO	Indicators	Items	Number of items	Score	Total Score
1	Able to find the topic sentences of the text	5	1, 5, 9, 13, 17	5	25
2	Able to identify main idea	4	2, 10, 14, 18	5	20
3	Able to identify the important information from the text.	3	6, 12, 15	5	20
4	Able to identify the specific vocabulary	4	3,4, 7, 19	5	15
5	Able to identify the conclusion	4	8, 11, 16, 20	5	20
	TOTAL	20			100

Table VII

The Indicator Reading Comprehension Text of Post – Test

NO	Indicators	Items	Number of items	Score	Total Score
1	Able to find the topic sentences of the text	3	1, 12, 16	5	15
2	Able to identify main idea	5	2, 5, 9, 13, 17	5	25
3	Able to identify the important information from the text.	4	3, 6, 14,18	5	20
4	Able to identify the specific vocabulary	5	4,7,10,15,19	5	25
5	Able to identify the conclusion	3	8, 11, 20	5	15
	TOTAL	20			100

E. Validity and Reliability instrument

a. Validity

AnasSudijono states that Validity is a characteristic of the good test. To get the validity of an achievement test can be used two ways:[8]

1) Totality of the test validity

2) Item validity

In this research, the researcher uses 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. Where, the test consists of 50 multiple-choice tests that will be divided in to two groups. They are 25 for pre-test and 25 for post-test.

To know the validity of the each question will be refer to list r biserial with r_t *in 5% significant*: 0.325 and 1% significant: 0.418. So, if $r_{account} > r_{table}$ the test is classified valid.

So, to get the validity of the test, the formula of *r pointbiserial* can be used as follow:

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

Where:

r_{pbi} : coefficient item validity

M_p : mean score of the total sore

SD_t: Standard Deviation of the total score

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[8]AnasSudijono.*PengantarEvaluasiPendidikan* (Jakarta: PT Raja GrafindoPersada, 1996), p. 163.

p: presentation of the right answer of the item tested validity.

q: presentation of the wrong answer of the item tested validity.

From the result of the analysis fifty instrument test, where twenty five for pre-test and twenty five for post-test. Researcher concluded that for pre-test only twenty are categorized valid and five are categorized invalid. (See the appendix 7). Then, for the post-test also twenty are categorized valid, and five categorized invalid. The calculation of how to get it can be seen in the appendix 10. So, researcher conducted 20 items for each group (Appendix3 and 4). So, researcher conducted twenty items for each class.

2) Reliability of The Test

An instrument of the research must be reliable. A reliable test is consistent and dependable.[9]To get the reliability of the test, AnasSudijono says that K-R 20 is used to obtain the reliability of the test. So, the researcher uses formula K-R 20 as follow.[10]

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

In Which:

R_{11} : Reliability of the Instrument

N   : Total of Question

St^2 : Variants Total

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[9]H. Douglas Brown. *Language Assessment Practical and language Practice*, (San Francisco: Longman, 2003), p. 21.
[10]*Op. Cit.,* p. 188.

P   : <u>Proporsi Subject who is right Answer(1)</u>
                           N

Q   : <u>Proporsi Subject who is Wrong Answer (0)</u>
                           N

Reliability is a good character of the test that refers to the consistency of the measurement. The test is reliableif $r_{count} > r_{table}$ by using formulation KR-20 with r_{table} 0.70.

F. Technique of Data Collection

In collecting data to determine the result of the research, the researcher uses test to students. The test divided into two kinds; pre-test and post-test. This test concluded some steps, they are:

a. Pre test

The pre-test is conducted to find out the homogeneity of the sample. The function of the pre-test isto find the mean scores of the P2R strategy group and conventional group before the researcher gives treatment to the experimental group. In this case, the researcher used some steps. They are:

1) The researcher prepares the test 20 items.

2) The researcher distributes the paper of the test to students of experimental class and control class.

3) The researcher explains what students to do.

4) Giving time.

5) The students answer the question.

6) Collecting their paper test to researcher.

7) The researcher checks the answer of students and finds the mean score of control and experimental class.

b. Post-test

   After giving treatment, the researcher conducted 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. After conducting the post-test, the researcher analyzed the data, and then, the researcher found out the effect of using P2R strategy in the experimental class. The researcher has some procedures. They are:

1) The researcher prepares the test 20 item

2) The researcher distributes the paper of the test to students of experimental class and control class.

3) The researcher explains what students do.

4) Giving time.

5) The students answer the question.

6) Collecting their paper test to researcher.

7) The researcher checks the answer of students and found the mean score of control and experimental class.

G. Technique of Data Analysis

In this research, the researcher uses the technique of data analysis as follow:

a. Requirement test

1) Normality test

The researcher uses normality test with using *Chi-Quadrat* 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 in significant level 5% (0.05) = 5.991 and degree of freedom as big as total of frequency is lessened 3 (dk= k-3).

2) Homogeneity test

To test the data whether is homogenous or not, the researcher uses Harley test, as follow:[11]

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[11] AgusIrianto, *Op. Cit.,* p.276.

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

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

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

Hypothesis isrejected if $F \leq F\frac{1}{2}$ a $(n_1.1)$ $(1= n_2-1)$, while if F $_{count}$

$>F_{table}$, hypothesis is accepted. It determined with significant level 5%

$(0.05)=1.697$, and dk numerator is (n_1-1), while dkdenominator is (n_2-1).

b. Hypothesis Test

Based on the hypothesis, the analysis of the data is done to find out the ability of two groups that have been divided into experiment class and control class. hypothesis isthe answering result of the research. So, data Analysis is used to test the hypothesis by using *t-test*.

$H_a : \mu_1 > \mu_2$

$H_o : \mu_1 \leq \mu_2$

If $H_{a:} \mu_1 > \mu_2$, It means the result of students' reading comprehension by using P2R (Preview, Read, Review) strategy at grade VIII MTs Negeri2Padangsidimpuanis better than conventional strategy. But, if the $H_0: \mu_1 \leq \mu_2$, it means the result of students' reading comprehensionby using P2R (Preview, Read, Review) strategy at grade VIII MTs Negeri2 Padangsidimpuan is notbetter than conventional strategy. To test the hypothesis, researcher uses the formula as follow:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{s\sqrt{\dfrac{1}{n_1} + \dfrac{1}{n_2}}}$$

Where:

$\overline{x}_1$ = Mean of experimental class sample

$\overline{x}_2$ = Mean of control class sample

n_1 = Total of experimental class sample

n_2 = Total of control class sample[12]

and the formula of standard deviation is:

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

Where:

s = Variant

$s_1^{\,2}$ = Variant of experimental class

$s_2^{\,2}$ = Variant of control class[13]

To test the criteria of hypothesis isif H_a is accepted by – $t_{table} < t_{count} < t_{table}$. By opportunity $\left(1 - \dfrac{1}{2}\alpha\right)$ and dk = $(n_1 + n_2 - 2)$, 37+37=72= 1.67, and H_o is rejected if there is$t$to the other results.

---

[12]Sugiyono.*StatistikauntukPenelitian.*(Bandung: Alfabeta, 2011), p. 138-139.

CHAPTER IV

DATA ANALYSIS

In this chapter, researcher collected the data and gave the test about reading comprehension tothe sample. The sample of this research is class VIII-1 for experimental class and class VIII-2 for control class. The test was divided into two aspect, they are pre-test and post-test. Pre-test was done before conducted the treatment, and post-test was done after conducted the treatment. Researcher applied quantitative analysis by used the formulation of *t-test*. It is done to know the effect of P2R (Preview, Read, Review) strategy on students' reading comprehension. Then, Researcher will describe the result based on the data that has been researched as follow.

A. Description of Data

1. Description of Data BeforeUsing P2R (Preview, Read, review) strategy

   a. Score of Pre-Test Experimental Class

Tabel VIII
The score of Experimental Class in Pre-Test

Total	1965
Highest score	65
Lowest score	35
Mean	59.55
Median	61.22
Modus	57.15
Range	30
Interval	5
Standart deviation	8.05
Varians	69.93

Based on the table above the total score of experiment class in pre-test was 1965, mean was 59.55, standart deviation was 8.05, varians was 69.93, median was 61.22, range was 30,modus was 57.15, interval was 5. The researcher got the highest score was 65 and the lowest score was 30 . Next, the calculation of how to get it could be seen in the appendix 17. Then, the computed of the frequency distribution of the students' score of experiment class could be applied into table frequency distribution as follow:

Table IX
Frequency Distribution of Students' Score

No	Interval	Frequency	Percentages
1	35-39	2	5.40%
2	40-44	3	8.10%
3	45-49	4	10.81%
4	50-54	5	13.51%
5	55-59	12	32.43%
6	60-64	6	16.21%
7	65-69	5	13.51%
$i = 5$		37	100%

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

Figure 1. Histogram Result Score of the Students' Reading Comprehension in experimental class in Pre-test
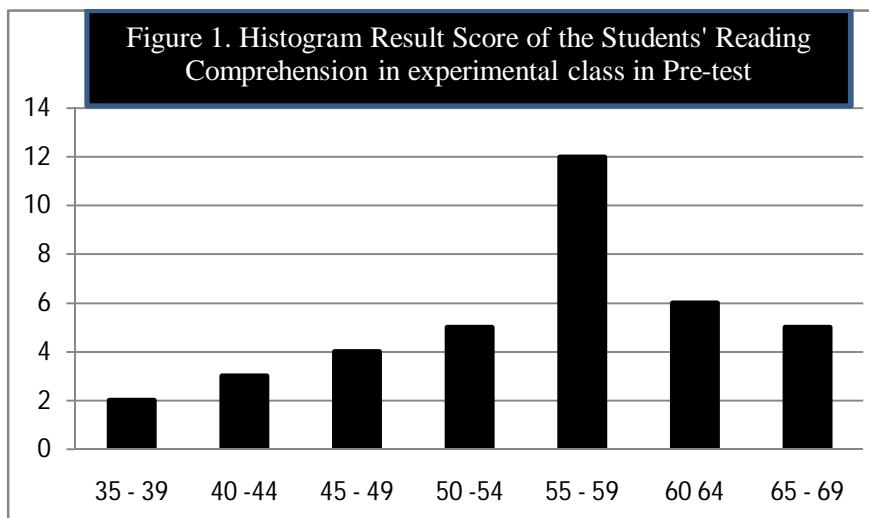
b. Score of Pre Test Control Class

Tabel XII
The Score of Control Class in PreTest

Total	1965
Highest score	65
Lowest score	35
Mean	58.85
Median	61
Modus	58.25
Range	30
Interval	5
Standart deviation	8.55
Varians	60.90

Based on the table above the total score of control class in pre-test was 1965, mean was 58.85, median was 61, mode was 58.25, range was 30, interval was 5, standart deviation was 8.55, varians was 60.90. The researcher got the highest score was 65, and the lowest score was 35.(See appendix 17). Then, the computed of the frequency distribution of the students' score of experiment class could be applied into table frequency distribution as follow:

Table XIII
Frequency Distribution of Students' Score

No	Interval Class	F	Percentages
1	35 - 39	2	5.40%
2	40 - 44	4	10.81%
3	45 - 49	3	8.10%
4	50 - 54	6	24.32%
5	55 - 59	9	16.21%
6	60 - 64	8	21.62%
7	65 - 69	5	13.51%
	$i = 5$	37	

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

Figure 3. Histogram Score Result of the Students' Reading Comprehension in Control Class in Pre-Test
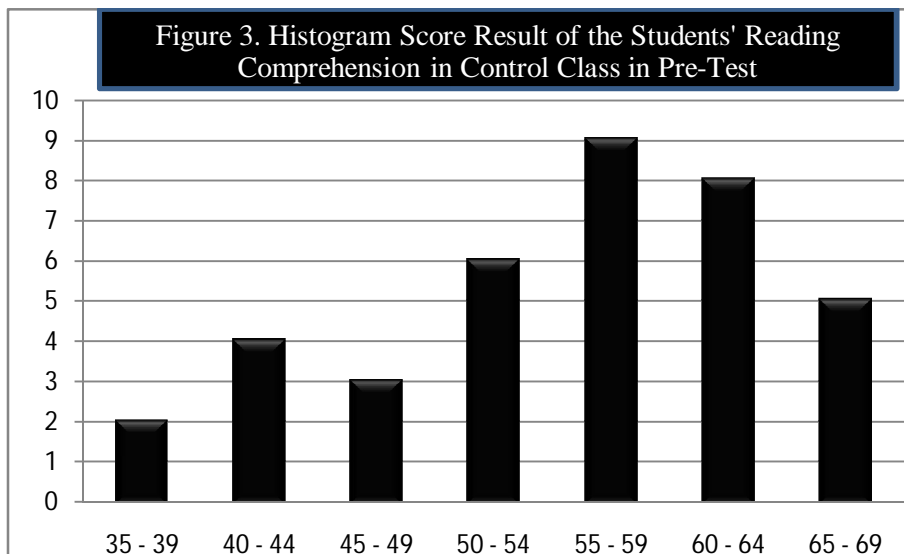
2. **Description of Data After Using P2R (Preview, Read, review) strategy**

   a. **Score Post-Test of Experimental Class**

Tabel X
Score of Experimental Class in Post-Test

Total	2985
Highest score	95
Lowest score	65
Mean	81.35
Median	84.3
Mode	82
Range	30
Interval	5
Standart deviation	8.2
Varians	61.33

Based on the table above the total score of experiment class in post-test was 2985, mean was 81.35, median was 84.3, mode was82, range was 30, interval was 5, standart deviation was 8.2, varians was 61.33. The researcher got the highest score was 95 and the lowest

score was 65 . Next, the calculation of how to get it could be seen in
the appendix 20. Then, the computed of the frequency distribution of
the students' score of experiment class could be applied into table
frequency distribution as follow:

Table XI
The Frequency Distribution of Students' Score

No	Interval Class	f	Percentages
1	65 – 69	2	5.40%
2	70 – 74	4	10.81%
3	75 – 79	4	10.81%
4	80 – 84	15	40.54%
5	85 – 89	4	10.81%
6	90 – 94	5	13.51%
7	95 – 99	3	8.10%
	$i = 5$	37	100%

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

Figure 2. Histogram Score result of the Students' Reading Comprehension by Using P2R (Preview, Read, Review) Strategy in Experimental Class in Post-Test
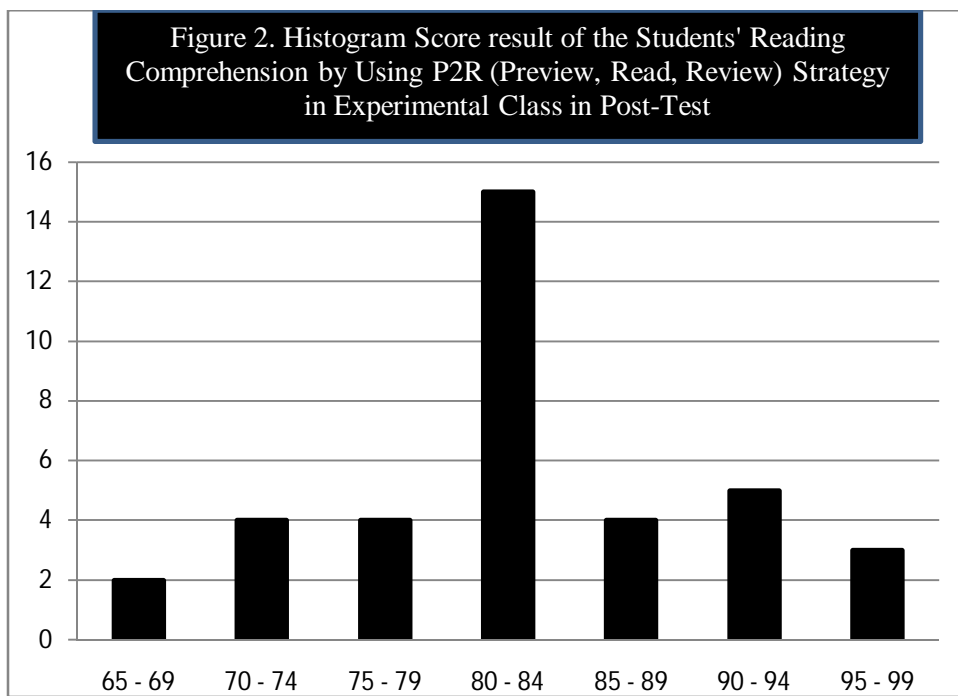
b. Score of Control Class in Post-Test

<div align="center">

Tabel XIV
The Score of Control Class in Post-Test

Total	2765
Highest score	90
Lowest score	60
Mean	77.65
Median	81.4
Modus	76.3
Range	30
Interval	5
Standart deviation	11.2
Varians	45.75

</div>

Based on the table above the total score of control class in post-test was 2765 ,mean was 77.65, standart deviation was 11.2, varians was 45.75, median was 81.4, mode was 76.3, range was 30, interval was 5. The researcher got the highest score was 90 and the lowest 60 score was . Next, the calculation of how to get it could be seen in the appendix   20. Then, the computed of the frequency distribution of the students' score of experiment class could be applied into table frequency distribution as follow:

<div align="center">

Table XV
Frequency Distribution of Students' Score

No	Interval Class	F	Percentages
1	60 - 64	4	10.81%
2	65 - 69	5	13.51%
3	70 - 74	6	16.21%
4	75 - 79	9	24.32%
5	80 - 84	5	13.51%
6	85 - 89	4	10.81%
7	90 – 94	4	10.81%
$i = 5$		37	100%

</div>

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

Figure 4. Histogram Score Result of the Students' Reading Comprehension by Using Conventional Strategy in Control Class Post-test
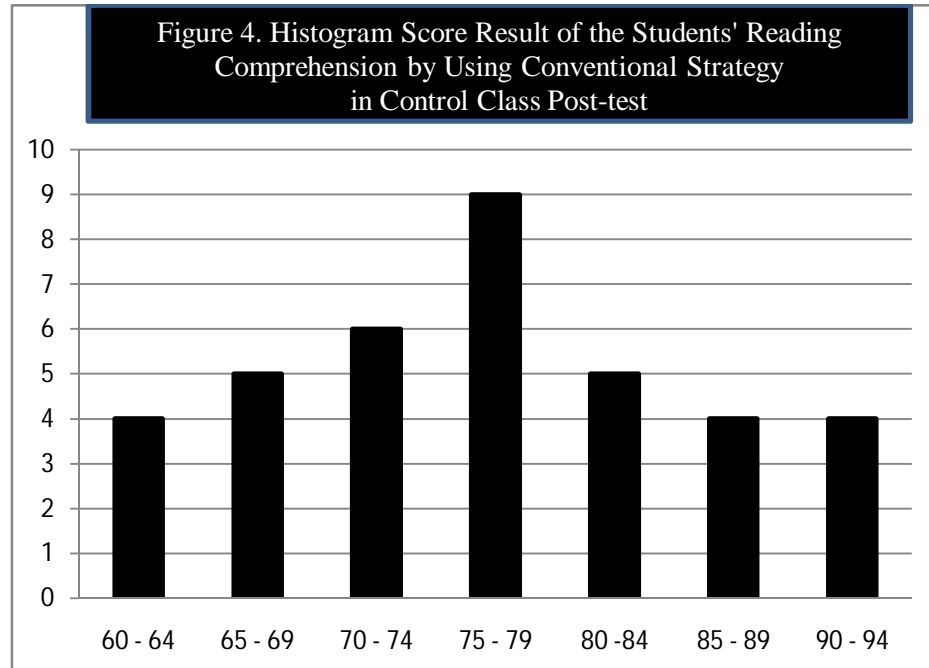
c. **Technique of Data Analysis**

1. **Requirement test**

a. **Normality and Homogeneity Pre-Test**

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

Tabel XVI
Normality and Homogenity in Pre-Test

Class	Normality Test		Homogeneity Test	
	t_{count}	t_{table}	t_{count}	t_{table}
Experiment Class	1.30	5.991	1.14<1.67	
Control Class	2.60	5.991		

Based on the table above researcher calculation, the score of exsperiment class Lo=1.30<Lt=5.991 with n =37 and control class Lo=2.60< Lt=5.991 with n =37, and real level α 0.05. Cause $_{Lo}$< Lt in the both class. So,H_o was accepted. It mean that experiment class and control class were distributed normal. (See appendix 17 and 18).

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

Then, the coefficient of F $_{count}$ = 1.14was compared with F table. Where F table was determined at real α =0.05, and the same numerator dk=N-1= 37-1=36 and denominator dk N-1= 37–1= 36 So, by using the list of critical value at F distribution is got F $_{0.05}$= 1.697. It showed that F $_{count}$ (1.14)< F $_{table}$ (1.697). So, it could be concluded that the variant from the data of the students' Reading Comprehension at MTs Negeri 2 Padangsidimpuan by experimental and control class was homogen. The calculation can be seen on the appendix 18.

b. **Normality and Homogeneity Post Test**

1) Normality of experimental class and control class in Post-test

Tabel XVII
Normality and homogenity in post-test

Class	Normality Test		Homogeneity Test	
	t_{count}	t_{table}	t_{count}	t_{table}
Experiment Class	1.11	5.991	1.34<1.697	
Control Class	2.30	5.991		

Based on the table aboveresearcher calculation, the score of eksperimental class Lo=1.11< Lt=5.991 with n =37 and control class Lo=2.30< Lt=5.991 with n=37, real level α was 0.05, Cause $_{Lo}$< Lt in the both class. So,H_a was accepted, it mean that experiment class and control class were distributed normal. The calculationcould be seen on the appendix 20 and 21.

2) Homogenity of Experimental Class and Control Class in Post-Test

Then, the coefficient of F $_{count}$ =1.11 was compared with F table. Where F table was determined at real α =0.05, and the same numerator dk=N-1= 37-1=36 and denominator dk N-1= 37–1=36 So, by using the list of critical value at F distribution was got F $_{0.05.}$=1.697. It showed that F_{count} (1.34) < F_{table} (1.697). So, it could be concluded that the variant from the data of the students' ability in Students' Reading Comprehension at MTs Negeri 2 Padangsidimpuan by eksperimental and control class was homogeny. Researcher calculation, it could be seen on the appendix 22.

2. **Hypothesis Test**

The data would be analyzed to prove hypothesis by using formula of T-test. Hypothesis alternative (H_a) of research was "There is the effect of P2R (Preview, Read, Review) strategy on Students' Reading Comprehension. The result of the researcher calculation could be seen as follow:

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

So:

$$S = \sqrt{\frac{(37-1)61.33 + (37-2)45.75}{37 + 37 - 2}}$$

$$= \sqrt{\frac{37\,(61.33) + 35\,(45.75)}{72}}$$

$$= \sqrt{\frac{2269.21 + 1601.25}{72}}$$

$$= \sqrt{\frac{2134{,}76}{72}}$$

$$= \sqrt{53.75}$$

$$= 7.33$$

So:

$$t = \frac{\overline{X}_1 - \overline{X}_2}{s\sqrt{\dfrac{1}{n_1} + \dfrac{1}{n_2}}}$$

$$t = \frac{81.35 - 77.65}{7.33\sqrt{\dfrac{1}{37} + \dfrac{1}{37}}}$$

$$= \frac{3.7}{7.33\sqrt{0{,}027 + 0.027}}$$

$$= \frac{3.7}{7.33\,(0.054)}$$

$$= \frac{3.7}{0{,}39}$$

$$= 4.11$$

Table XVIII
Result of T-test from the Both Averages

Pre-test		Post-test	
t_{count}	t_{table}	t_{count}	t_{table}
0.16	1.67	4.11	1.67

H_a: $\mu_1 > \mu_2$

H_o: $\mu_1 \leq \mu_2$

Where:

H_a: $\mu_1 > \mu_2$ "P2R (Preview, Read, Review) strategyis better than conventional strategy on Students' Reading Comprehension."

H_o: $\mu_1 \leq \mu_2$ "P2R (Preview, Read, Review) strategyis not betterthan conventional strategy on Students' Reading Comprehension."

Based on researchercalculation, researcher found that t_{count} 4.11 while t_{table} 1.684. With opportunity $(1 - \alpha) = 1-5\% = 95\%$ and dt = $(n_1 + n_2 -2) = (37 + 37 - 2) = 72$, cause $t_{count} > t_{table}$ (4.11>1.67) . It means that hypothesis (H_a) was accepted.So, there isthesignificant effect of P2R (Preview, Read, Review) strategy on Students' Reading Comprehension. It described the mean score of experiment class by using P2R (Preview, Read, Review) stategy was 81.35, and mean score of control class in using Conventional strategy was77.65 So, From the explanation above, the students' Reading Comprehension by using P2R (Preview, Read, Review) strategy is better than conventional strategy $(\mu^1 > \mu^2)$.The researcher calculationcan be seen on the appendix 23 and 24.

d. Discussion

Based on the theory and related findings, the researcher discussed the result of this research and compared with the related findings. First, the result of a research by using skimming strategy was found that mean score was 76.84 and the hypothesis was accepted. It means, there was the effect of skimming strategy on students' achievement in reading comprehension. Second, the mean score result of a research by using PredictionInformation from the Picture was 73.93. The hypothesis concluded that this strategy was better than conventional strategy. Then, the research by using P2R (Preview, Read, Review) strategy to find mind ideas showed that the result of the mean score of the second cycle was 77.5. It means, the implication of this strategy can increased the students reading comprehension to find the mind ideas. It can be seen based onscore result in the first cycle 63.86 and the second cycle77.5.

Further, the researcher found that using P2R (Preview, Read, Review) strategy showed the result of mean score in experimental class was 81.35 and control class was 77.65. It means the result and hypothesis testing showed that P2R Preview, Read, Review) strategy has the effect, and hypothesis alternative (H_a) is accepted and hypothesis zero (H_0) is rejected. It can be seen from last score of the calculation above,It was indicated that the score of experimental class was bigger than control class (81.35>77.65),   and also indicated $t_o \square t_t$ (4.11 $\square$ 1.67).

Based on the analysis above, the researcher concluded that using P2R (Preview, Read, Review) strategy is better than using skimming strategy with the result 81.35>76.84. Then, P2R (Preview, Read, Review) strategyis better than using Prediction information from the picture with mean score 81.35 >73.93. Thus, the researcher concluded that P2R (Preview, Read, Review) strategy also was an effective and efficient strategy and can improve the students' reading comprehension.

e. **Threats of the Research**

In this research, the researcher found the threats of this research as follows:

1. There are some students that are noisywhile teaching and learning process. So, it can disturb the concentration of the others.

2. There are some students that are lack of serious to answer the test in pre-test and post-test.It can be the threat of the research. So, the researcher can not reach the validity of trustworthiness data.

3. The researcher is lack of knowledge and experience in processing data. So, the researcher needed much time to finish the thesis.

Based on the threats above, the researcher tried with all efforts, hard work and with a vengeance as much as possible to do the best in this research. The researcher can complete this thesis also with the assistance of all parties and consultation with the advisors.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

Based on the result of data analysis that had described in the previous chapter, the researcher concluded that there is thesignificant effect of P2R (Preview, Read, Review) strategy on Students' Reading Comprehension of Recount Text at MTs Negeri 2 Padangsidimpuan.So, the hypothesis alternative (H_a)is accepted.It is based on the mean score of experimental class after using P2R (Preview, Read, Review) strategyis bigger than control class (81.35>77.65)andproven with $t_{count}$is higher than t_{table}(4.11> 1.67). The hypothesis zero (H_0) was rejected. Thus, the researcher concluded that P2R (Preview, Read, Review) strategyis an effective and efficient on students' reading comprehension.

B. Suggestion

After finishing this research, the researcher got much information in English teaching and learning process. Therefore, the writer has suggestion to:

1. The Principal of MTs Negeri 2 Padangsidimpuan,to motivate the teacher, especially English teachers to teach as well as possible by maximizing the using of P2R (Preview, Read, Review) Strategy in teaching, because through this research, it was significantly proven that this strategy increased the students' reading Comprehension.

2. The English teacher, to increase the students' ability in learning English, especially in increasing the students' ability in reading comprehension. One of the efficient and effective strategy that can increase reading comprehension wasthrough P2R (Preview, Read, Review) strategy.

3. Other researcher, the findings of this research were subject matters which can be developed largely and deeply by adding other variables or enlarge the samples.

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