THE EFFECT OF JIGSAW TECHNIQUE TOWARDS STUDENTS' WRITING ABILITY AT GRADE X MAS DARUL ULUM SIPAHO PEMADU

A THESIS

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

Written by:

IMANDA PUTRI HARAHAP
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TARBIYAH AND TEACHER TRAINING FACULTY

STATE INSTITUTE FOR ISLAMIC STUDIES

PADANGSIDIMPUAN

2021

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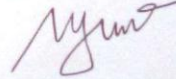**IMANDA PUTRI HARAHAP**
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STATE INSTITUTE FOR ISLAMIC STUDIES

PADANGSIDIMPUAN

2021

LETTER OF AGREEMENT

Term : Munaqosyah

Item : 7 (seven) examplars

Padangsidimpuan,   December 2020

a.n. **Imanda Putri Harahap**

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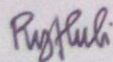**Tarbiyah and Teacher Training Faculty**

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Padangsidimpuan

Assalamu 'alaikum wr.wb.

After reading, studying and giving advice for necessary revision on the thesis belongs to **Imanda Putri Harahap**, entitled **"The Effect of Jigsaw Technique Towards Students' Writing Ability At Grade X MAS Darul Ulum Sipaho Pemadu"**. We assumed that the thesis has been acceptable to complete the assignments and fulfill the requirements for graduate degree of Education (S.Pd) in English Education Department, Tarbiyah and Teacher Training Faculty in IAIN Padangsidimpuan.

Therefore, we hope that the thesis will soon be examined by the Thesis examiner team of English Education Department of Tarbiyah and Teacher Training Faculty IAIN Padangsidimpuan. Thank you.
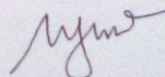
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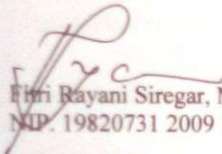
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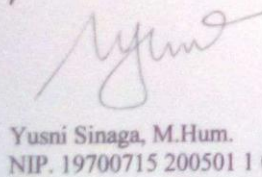
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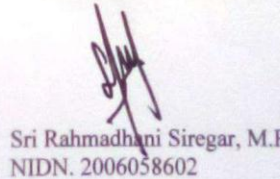
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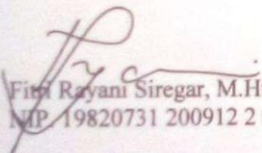: **IMANDA PUTRI HARAHAP**
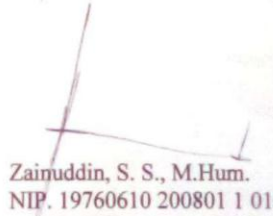
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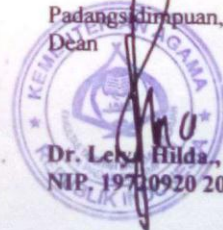Department   : English Education (TBI-1)
Tittle of Thesis : The Effect of Jigsaw Technique Towards Students'
                  Writing Ability at Grade X MAS Darul Ulum Sipaho
                  Pemadu

ABSTRACT

This research focuses on the effect of jigsaw technique towards students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu. The students' problems in writing are: 1) the students are not able to express their idea, 2) the students are lack in vocabulary, 3) the students are lack in understanding grammar, and 4) the students assume that writing is boring.

The purpose of this research is to examine wheter there is significant effect of jigsaw technique towards students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu. The formulation of this research are 1) how is the students' writing ability in writing before using jigsaw technique at grade X MAS Darul Ulum Sipaho Pemadu, 2) how is the students' writing ability after using jigsaw technique at grade X MAS Darul Ulum Sipaho Pemadu, 3) is there any significant effect of using jigsaw technique towards students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu.

This research uses one group pre-test and post-test design. The instrument of this research is writing test (pre-test and post test). The population of this research are 91 tenth grade students of MAS Darul Ulum Sipaho Pemadu. Two classes are choose randomly as the sample. The sample are class X-IPA (30 students) as experimental class and class X-IPS^{1} (28 students) as control class. The data of this research are collected by using t-test formula.

The result shows that the mean score of experimental class after using Jigsaw Technique is higher than control class. The Mean score of experimental class in pre-test was 48,12 and the mean score of control class in pre-test is 50,04. Meanwhile, the mean score of experimental class in post-test after using Jigsaw Technique is 71,31 and the mean score of control class in post-test without a treatment is 57,81. Moreover, from t-test, it is found that t_{count} (5,037) is higher than t_{table} (1,67252). Therefore, the Alternative Hypothesis (H_a) of this research is accepted and the Null Hyphotesis (H_0) is rejected. It could be concluded that there is the effect of Jigsaw Technique towards students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu.

Keywords: Jigsaw Technique,Writing Ability

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Judul Skripsi : **Pengaruh Teknik Jigsaw Terhadap Kemampuan Menulis Siswa Kelas X MAS Darul Ulum Sipaho Pemadu**

ABSTRAK

Penelitian ini fokus pada pengaruh teknik jigsaw dalam kemampuan menulis siswa kelas X MAS Darul Ulum Sipaho Pemadu. Masalah-masalah siswa di dalam menulis adalah 1) siswa tidak mampu mengekspresikan ide mereka, 2) siswa lemah dalam penguasaan kosa kata, 3) siswa kurang memahami tentang tata bahasa, dan 4) siswa berasumsi bahwa menulis membosankan.

Tujuan dari penelitian ini adalah untuk menguju apakah ada pengaruh signifikan dari teknik jigsaw terhadap kemampuan menulis siswa kelas X MAS Darul Ulum Sipaho Pemadu. Rumusan masalah dalam penelitian ini adalah 1) bagaimana kemampuan menulis siswa sebelum menggunakan teknik jigsaw pada kelas X MAS Darul Ulum Sipaho Pemadu, 2) Bagaimana kemampuan menulis siswa setelah menggunakan jigsaw teknik pada kelas X MAS Darul Ulum Sipaho Pemadu, 3) Apakah ada pengaruh yang signifikan dalam penggunaan teknik jigsaw terhadap kemampuan menulis siswa pada kelas X MAS Darul Ulum Sipaho Pemadu.

Penelitian ini menggunakan desain satu kelompok *pre-test* dan *post-test*. Instrumen yang digunakan dalam penelitian ini adalah tes menulis (*pre-test* dan *post-test*). Populasi dalam penelitian ini adalah 91 siswa kelas X MAS Darul Ulum Sipaho Pemadu. Dua kelas dipilih secara acak sebagai sampel. Sampelnya adalah kelas X-IPA (30 siswa) dan kelas X-IPS^1 (28 siswa) sebagai kelas kontrol. Data penelitian ini dikumpulkan dengan menggunakan rumus uji-t.

Hasil penelitian menunjukkan bahwa skor rata-rata kelas eksperimen setelah menggunakan teknik jigsaw lebih tinggi daripada kelas kontrol. Skor rata-rata kelas eksperimen di *pre*-test adalah 48,12 dan skor rata-rata kelas kontrol di *pre-test* adalah 50,04. Sedangkan, skor rata-rata kelas eksperimen di *post-test* setelah menggunakan teknik jigsaw adalah 71,31 dan skor rata-rata kelas kontrol di *post-test* tanpa perlakuan adalah 57,81. Selain itu, dari uji-t ditemukan bahwa t_{hitung} (5,037) lebih besar daripada t_{tabel} (1,67252). Oleh karena itu, hipotesis alternatif (H_a) dari penelitian ini diterima dan hipotesis nol (H_0) ditolak. Dapat disimpulkan bahwa ada pengaruh Jigsaw Technique dalam kemampuan menulis siswa kelas X MAS Darul Ulum Sipaho Pemadu.

Kata Kunci: Teknik Jigsaw,Kemampuan Menulis

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Firstly, I would like to convey my grateful thanks to Allah SWT., the most Beneficent, and the most Merciful who has given me health, time, chance, and blessings for finishing this thesis untitled "The Effect of Jigsaw Technique Towards Students' Writing Ability at Grade X MAS Darul Ulum Sipaho Pemadu". Secondly ,shalawat and salam always be upon the great Prophet Muhammad SAW as the messenger of Allah SWT and the best pattern for human life.

It is common having some troubles in finishing this thesis. Exactly, it is impossible to finish this thesis without any help from people around me. Therefore, I wish to express my sincere thanks and this opportunity I take to do so. My great gratitude is along with the following people:

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I realize that this thesis cannot be considered perfect without critiques and suggestions. Therefore, it is such a pleasure to get critiques and suggestions from the readers in order to make this thesis better.

Padangsidimpuan, December 2020

Researcher

Imanda Putri Harahap
Reg. Num. 16 203 00029

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CHAPTER I

INTRODUCTION

A. Background of the Problem

In learning English there are four skills that should be mastered, they are listening, speaking, reading, and writing. Listening and speaking are included in receptive skills while speaking and writing are considered to be productive skills. From those four skills, the researcher only focus on writing. Writing is one of basic language skills should be learnt beside reading, speaking, and listening in language learning. It involves the application of grammatical knowledge which are including sentence patterns, vocabulary, diction, and cultural understanding of target language.

Writing is very important and must be attention in learning English. If students can not able to write, they will be difficult to have ability in English. By writing, someone can share his idea, concept, opinion, and also feeling. So,writing is very important to learn. However, in Qur'an Allah SWT ordered human to read and write, which stated in surah al-Alaq(96); 3-5, as follow:

اقْرَأْ وَرَبُّكَ ٱلْأَكْرَمُ ۝

ٱلَّذِى عَلَّمَ بِٱلْقَلَمِ ۝

عَلَّمَ ٱلْإِنسَـٰنَ مَا لَمْ يَعْلَمْ ﴿٥﴾
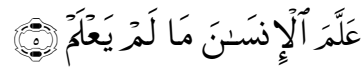
Means:

"*Read! Your Lord is The most generous. Who has taught (the writing) by the pen first person to write was prophet anouch. Has taught man that he knew not.*"

From verse above, it means as human must learn everything around the world. These verse informs human that a man's creation beginning from a dangling clot. He taught human which did know everything until can write. Therefore, writing is one skill that should be mastered by students for some reasons. First, writing help to express their ideas became someone who have critically thinking. As Overbaugh & Schultz cited in Indah, the qualities of writing essay involve the development of critical thinking skill.[1] Also, Quitadamo and Kurtz shows that writing can improve students' critical thinking performance through the habit of writing regularly.[2] So, writing increase students' critical thinking to put ideas in writing.

Second, writing becomes a tool for communication with other people in written form. It is being used in many aspects such as advertisment, legal document, business transactions, political and military, and newspaper. In this modern era, send a text become easier one through email or texted via

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[1]Rohmani N. Indah, "Critical Thinking, Writing Performance and Topic Familiarity of Indonesian EFL Learners," *Journal of Language and Research* 8, no. 2 (2017): p.233, https://scholar.google.co.id.

[2]Ian J. Quitadamo and J. Kurtz Martha, "Learning to Improve: Using Writing to Increase Critical Thinking Performance in General Education Biology," *CBE Life Science Education* 6 (2007): p.149, https://scholar.google.co.id.

smartphone. It supported by Harmer who says that in present-day, a modern version of written communication or texted is received via mobile phone.[3] It means that writing is very close and important in daily life.

In English writing lesson, there are several types of genres such as descriptive, narrative, recount, report, procedure, hortatory, explanation, discussion text, and many more. Based on syllabus of curriculum in senior high school, one of the genres should be mastered by students which is descriptive text.Nita *et.al*.cited in Oshima and Hogue descriptive writing appeals to the senses, so it tells how something looks, feels, smells, tastes or sounds.[4]The common definition of descriptive text is a text that describes things, places, people, or events in a detail explanation.

Commonly, teaching writing descriptive text has been learnt from junior high school until senior high school. From that, the students must be mastered in teaching writing, but in fact it is still become problematic. In addtion, Rozimela *et.al*. stated that students have five difficulties when writing a descriptive text. First, students have problem in developing the ideas in which paragraphs that students have written is ambigous. Second, students have problem in organizing the ideas to write descriptive text clearly. Third, students have a problem in grammar which is they have difficulties in arranging the words correct patterns. Fourth, students have lack of vocabularies. Fifth, the students have problem in using punctuation,

[3]Jeremy Harmer, *How to Teach Writing* (England: Pearson Education Limited, 2004), p.3, en.bookfi.net.

[4]Wardah Aprianti, Nita, Albert Rufinus, "The Effective Use of Jigsaw in Teaching Descriptive Text Writing," 2014, 1–8, https://scholar.google.co.id.

capitalization, and spelling.[5] So, there are some aspects of difficulties in writing descriptive text, such as content, developing the ideas, grammar, vocabulary, punctuation spelling, capitalization, and also generic structure.

Beside, the problem in writing desriptive text that researcher found from journal, in MAS Darul Ulum Sipaho also have some problem in writing descriptive text. Based on interview with the teacher of MAS Darul Ulum Sipaho Pemadu, there are many problems in mastering writing especially in writing descriptive text. The English teacher said "the students are difficult to develope their ideas into a written. It is like stuck in their mind. In fact, the students can translate English sentence into Indonesia sentence well, but they are lack into create an English sentence. Then, before starting the lesson, the teacher always gives vocabulary, but they never memorize it. So, they are still lack of vocabulary. Next, students are difficult to arrange a good sentence. It means that they have not understood about grammar. They are still lack in understanding grammar. The last is the students feel bored while they are writing.[6]

From the explanation above the problems that students faced in writing are From teacher, the first, the students are difficult to develop a text. The second is the students are lack of vocabulary. The third is the students are lack in understanding.In this case, the teacher should use the appropriate

[5]Lailatul Husna, Zainal, and & Yenni Rozimela, "An Analysis of Students' Writing Skill in Descriptive Text at Grade XI Ipa 1 of MAN 2 Padang," *Journal of English Language Teaching* 1, no. 2 (n.d.): p.2-3, https://scholar.google.co.id.

[6]Jumrinah Siregar, *Private Interview* on July 18th 2020 in Sipaho, Halongonan

technique for teaching writing. It should be interesting and make students more active.

Based on curiculum 2013, teaching and learning process uses student-centered learning approach. It means that the students should be more active than the teacher. Cooperative learning is a technique that can apply based on curriculum 2013. Vani in Mahinpo defined cooperative learning as a teaching arrangement that refers to small, heterogeneous groups of students working together to achieve at common goal students work together to learn and are responsible for the teammate's learning as well as their own. Cooperative learning comes from a cooperative word that means working things together by helping each other as a group or a team.[7]

Jigsaw as one of the cooperative learning help students to build the good relationship to the other group member. Students could state opinion freely without feeling that they will judge for their opinion in her/his group and also in other group. It also encourages students to be more active look for the information that are needed. It because every group's member had their own task to accomplish which was counted as a contribution for the groups' achievment.[8] By using jigsaw technique, not only students get new knowledge from working together with their friend as a team work but also share knowledge with others.

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[7]Vani Listianti, Teacher Training, and Education Faculty, "Improving Students ' Writing Skill in Descriptive Text Through Think-Pair-Share Strategy" (IAIN Salatiga, 2017), https://scholar.google.co.id.

[8]Iranita Sitohang and Pupung Purnawarman, "The Effectiveness of Jigsaw Strategy to Improve Students' Skill in Writing a Recount Text," *English Education* 3, no. 2 (2015): 183–89, http://journal.uniku.ac.id.

In jigsaw technique teacher is not the sole provider of knowledge because most of the work is done by students themselves where it makes an effective and efficient to learn. Through learning by jigsaw technique, the students become active participants in the learning process and help them to build interpersonal and interactive skills among students. The use of this technique also makes teachers find it easy to learn, enjoy working with it. Then, this technique can be one of the guidelines used by teachers to deal with students who are passive in class.

Related to the background of the problem, the researcher takes the tittle "The Effect of Jigsaw Technique Towards Students' Writing Ability at Grade X MAS Darul Ulum Sipaho Pemadu".

B. Identification of The Problem

Based on bakcground above, the researcher identifies the problem are:

1. The students are not able to express their idea.

2. The students are lack in vocabulary.

3. The students are lack in understanding grammar.

4. The students assume that writing is boring.

C. Limitation of the Problem

Based on identification of the problem, the researcher limits the problem and just discusses one factor that is the technique. It is about the teacher technique in teacher writing especially in descriptive text, so the teacher can make writing activity more interesting. There are some techniques in writing but researcher just focus with jigsaw technique also

many text genres that students study but researcher limit the research with descriptive text.

D. Formulation of the Problem

Based on the limitation of the problem, there is problem that can be formulated as follows:

1. How is the students' writing ability before using jigsaw technique at grade X MAS Darul Ulum Sipaho Pemadu?

2. How is the students' writing ability after using jigsaw technique at grade X MAS Darul Ulum Sipaho Pemadu?

3. Is there any significant effect of using jigsaw technique towards students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu?

E. Objectives of the Research

From the formulation above, the objectives of the research are:

1. To describe the students' writing ability before using jigsaw technique at grade X MAS Darul Ulum Sipaho Pemadu.

2. To describe the students' writing ability after using jigsaw technique at grade X MAS Darul Ulum Sipaho Pemadu.

3. To examine the significant effect of using Jigsaw technique on students' writing ability at grade XMAS Darul Ulum Sipaho Pemadu.

F. Significances of the Research

The result of this research will give the benefit to some categories as follows:

1. For headmaster, the result of this research as a contribution to headmaster for increasing the quality of teacher in the school. The technique is

expected to be guide so the quality of teaching teacher in the school becomes more interactive.

2. For teacher, it will help them to develop their capability in teaching writing, and hopefully it will be an interesting technique to help students more enjoyable to put on their ideas into written.

3. For researcher, it can be the experience in teaching learning process and the source of the research will help other researcher to be related studies if they want to use jigsaw technique.

G. Definition of Operational Variables

1. Writing Ability

   Writing is a complex for conveying or delivering the ideas, thoughts, opinions, and feelings using combination of letters in written language. Writing ability is an ability that the writer has to organize the ideas into a coherent text by paying the grammar, spelling accurately, punctuation meaningfully, linking ideas and information across to develop a topic.

2. Jigsaw Technique

   Jigsaw is one type of cooperative learning which encourages the students to be active and help each others in understanding the materials for getting good achievment. According to Cox and Johanson points out of jigsaw is an effective collaborative learning activity design to increase personal responsibility of learning. [9] Beside to build

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[9] Fauzi Bafadal and Rafika, "The Effectiveness of Jigsaw Technique in Teaching Writing Descriptive Text," no. 1 (2016): 117–36, https://scholar.google.co.id.

responsibility, this technique also encourages engangement and interaction.

H. Outline of the Thesis

The systematic of this research is divided into five chapter. Each chapter consist of many sub chapters are follow: Chapter one, consisted of introduction, they are: the background of the problem, the identification of the problem, the limitation of the problem, the formulation of the problem, the objectives of the research, and the significances of the research.

Chapter two consits of the desription of writing descriptive text, jigsaw technique, the related findings, the conceptual framework, and the hypothesis.

Chapter three consists of methodology of the research which is divided into sub chapter; the place and time of the research, the research methodology, the population and sample, the research instrument, procedure of data collection, technique of analyzing data.

Chapter four consists of data description, hypothesis testing, discussion and the treaths of the research.

Chapter five consists of the conclusion about the result of this research and suggestion that are given by the research.

CHAPTER II

THEORITICAL DESCRIPTION

A. **Theoretical Description**

1. **Writing**

   a. **Definition of Writing**

   Writing is a person's language skills in expressing an idea, concept, feeling, and thoughts of himself and others as outlined in a written. Writing is one of the four basic skills that are very complex and difficult to learn. Writing place an important role in English language learning.[10] Writing is the most difficult competence to be achieved in language learning, since it requires the writers to involve higher cognitive competences in which they have to analyze, construct, edit, and revise ideas to produce good and qualified writing.[11] It is an activity for producing and expressing, it is producing the words and sentences then it expressing with the meaning of ideas, thus writing skill is the activity to transfer the ideas through words and sentences the idea will change to scientific.[12] It conclude that writing is an activity for producing the words to build and construct a good written.

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[10]Jassim Mohammed, "Using Jigsaw Cooperative Learning Strategy to Improve The EFL Iraqi Students in Writing Skill" 8118, no. 11 (2019): 504–24, https://scholar.google.co.id.

[11] Syamsiyah Devalina, "Implementing Clustering Technique to Improve Students' Ability in Writing Paragraph at Junior High School 4 Sipirok," *English Education* 3, no. 1 (2015): 122, jurnal.iain-padangsidimpuan.ac.id.

[12] Rayendriani Fahmei Lubis, "Writing Narrative Text," *English Education* 2, no. 1 (2014): 61–76, jurnal.iain-padangsidimpuan.ac.id.

According to Richard and Renandya stated that writing is difficult skill because the writer not only express the meaning of their thought but also put the idea on the words focus on spelling, grammar, word choice, and so on.[13]Furthermore Nunan says that writing is a mental act that creating ideas and expressing the ideas into sentences even paragraphs in order to make a reader clear understanding.[14]The other opinion stated by Binder and Nemey support that writing is an activity that is to be finished in the shorthest time possible by focused on grammar and writing. It means producing a text is consists of grammatical sentences. While Brown stated that writing is thinking process, because writing is a process of putting ideas down on paper to transform thought into words and give them structure and coherent organization.

Writing is a tool to produce language in written form. According to Cooper and Odell, writing is a task on ordering words into meaningful sentences or ideas to send information and present them on a piece of paper. While Reinking, Hard, & Osten concluded that writing is a way of communication.[15]So writing is one way or it is a tool to give information through write down an ideas on the paper. It

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[13]Jack C. Richard and Willy A. Renandya, *Metodology in Language Teaching* (United States of America: Cambridge University Press, 2002), p.303, en.bookfi.net.

[14]David Nunan, *Practical English Language Teaching* (Singapore: McGraw-Hill, 2003), en.bookfi.net.

[15]Siti Aisah Ginting, "Lexical Complexity on Descriptive Writing of Indonesian Male and Female EFL Learners," *English Education* 8, no. 3 (2018): 297–302, https://scholar.google.co.id.

is a process of putting an ideas into a good structure and coherent organization, so it is focusing on grammatical sentences.

b. Purpose of Writing

The purpose of writing depends on who the target readers are. According to Lombardo cited in journal Mohammed, there are five purposes of writing:

1) To inform, which is giving the fact objectives as possible.
2) To explain, which is explaining how something works and why something happened.
3) To persuade, which is convincing the readers to be in the same perspective with the writer.
4) To entertain, which is entertaining the raders with the enjoyable writing.
5) To describe, which is revealing something about a subject as detailed as possible.[16]

While according to Tony in thesis Lukman Bhakti as follows:

1) To inform
   Writing is a way to give information to the others through written.
2) To instruct
   It means to command someone to do something, especially as an official order.
3) To persuade
   It means to convince someone.
4) To narrate
   It means to tell a story or to tell what is in our mind.
5) To response
   It means reaction to an event or situation.[17]

As Lombardo in journal Mohammed said, there are five purposes should consider in order to present the information ideas clearly. Firstly, the purpose of writing is to inform. It means that the writers provide accurate information about the topics in orders to

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[16]Mohammed, "Using Jigsaw Cooperative Learning Strategy to Improve The EFL Iraqi Students in Writing Skill."

[17]Lukman Bhakti Hudaya, "The Use of Diary Writing in Teaching Writing Recount Text" (Syarif Hidayatullah State Islamic, 2018), http://www.repositoryuinjkt.ac.id.

make the reader understanding about the topic and they can increase their knowledge about it.

Secondly, the purpose of writing is to explain. It means that give information about how something happened or how it works. Thirdly, the purpose of writing is to persuade. In this purpose, showing clear thinking and to make the readers change their point of view about specific issues or topics. It means that writer should have ability in order to make a good paragraph.

Fourthly, the purpose of writing is to entertain where the writers have to stimulate the readers' imagination and emotions. The writer should have the ability to make the ideas as creative as possible, so the readers will be entertained. And the last the purpose of writing is to describe where the writers should describe something to the reader as detail as possible. And also based on Tony in thesis Lukman Bhakti there are five purposes of writing. They are to inform, to instruct, to persuade, to narrate, and to response, these five purposes has the same goal but just different in meaning.

c. **Process of Writing**

Harmer in Hudaya explains the some stages of the writing process. The stages are presented as follows:

1) Planning
   In this stage, the students make a list of ideas related to the topic. The use of brainstorming is a good activity in pre-writing stage, it is to stimulate the imagination to produce ideas on a topic or problem. The students plan what they are going to write in the first draft. In this stage, they have to

consider three main issues. The issues are the purpose of the writing, the audience they are writing for and the content structure to sequence the facts, ideas or arguments.

2) Drafting

After the students have a list of ideas related to the topic, it is the stage for the students to start writing the first draft. They write the ideas which they are going to write without paying attention to making mistakes.

3) Editing

In this stage, students should re-write their first draft after finishing it. Itspurpose is to see where it works and where it does not. The process of editing may be taken from oral or written feedback by peers and teachers. The feedback will help students to make revision of their writing. In general, students receive feedback from teachers days after the writing task has been completed, mistakes are highlighted and corrected, suggestions for improvement are provided. The revision shows what has been written. It means that this step isimportant to check the text coherence and to stimulate further ideas. Not only that, it also encourages students to find and correct their mistakes in writing.

4) Final Version

In this last stage, the students re-write their draft after revising with peersand teachers. The students have a good written text in the final product since they do the editing process before.[18]

In line Harmer explain there are four steps in writing process. Harmer called the first step is planningwhere the writers have to consider the purpose of the writing, to whom writing will be adressed, and the content struture of the writing itself including the ideas, facts, and arguments. The second step is drafting. Drafting is a phase which is the writers start to write the first version of the text that will be developed later on.

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[18]Hudaya.

The third step is editing, in this step the writers need suggestion or comment from the readers to revise which one the ideas are important and which one must be deleted. The last step is the final version, in this step the writers have to revise and edit the drafts and produce the final version in order to be ready for sending or sharing the writing itself to the audience.

In addition, Langan stated thatthe writing process involves the following steps, they are:[19]

1) Pre-writing

The writer has to be prepared to identify the ideas will be written by making free-writing, questioning, making an outline, and diagrams.

2) Writing a First Draft

When writing the first, write it first after settled on a topic in order to make a written clearly and develop the content with plenty of specific details.

3) Revising

Revising is the third process of writing in which revising means the writer amends, modifiers, and delete unnecessary information on a paper in order to make better changes.In this stage, focus on the style and content of the essay.

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[19]John Langan, *College Writing Skills, Media Edition*, Fifth (New York: McGraw-Hill, 2006), p.23.

4) Editing and Proofreading

Editing involves closely reading over the paper, looking for errors in grammar, punctuation, and spelling. After proofreading for formating errors, the essay is already to be read.

d. Genres of Writing

According to Brown there are three types of genres in writing as follows:

1) Personal Writing
In personal writing the writer focuses on informal writing, such as letter, email, greeting cards, invitation, message, notes, calendar entries, shopping list, reminders, questionare, personal journal, fiction.
2) Job Related Writing
Job related writing shows about the kinds or examples. They are messages, letters/emails, memos, and reports, schedules, labels, signs, advertisements, announcments, and manuals.
3) Academic Writing
In academic writing there are some kinds they are papers and general subject reports, essays, compositions, academically focused journals.[20]

As Brown say that there are three types of genres in writing. First, personal writing, requires someone to reflect on the topic on a personal level. The writing based on your opinions, thoughts, and experiences, like as letter, invitation, greeting cards, and so on. Second, job related writing where it connected with someones' work. It also talk about kind or example, such as memos, reports, schedule, sign, and so on. And the last, academic writing where it has a formal

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[20]H. Douglas Brown, *Language Assesment Principles and Classroom Practices* (New York: Longman, 2007), p.219.

tone and style, such as subject reports, essays, compositions, academically focused journals.

e. Types of Writing

According to Callella cited in Masitoh et.al, there are five main types of writing as follows:

1) Expository writing is where the author intends to inform, explain, describe or define their subject to people.

2) Descriptive writing uses a lot of great visual words to help someone see the person, place or thing.

3) Narrative writing is very common in novels and fabels.

4) Persuasive writing takes on the opinon of the writer or issue the writer is writing for.

5) Creative writing is oten thought provoking, entertaining, and more interesting to read.[21]

Furthermore according to Fachrurrazy cited in Tossi Ana Utami thesis, types of writing are:

1) Narration

Narration tells "what happened". It tells a story. It is kind of writing found in novels, short stories, and biographics. Narration usually follows time order.

2) Descriptive

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[21]Siti Masitoh & Dasep Suprijadi, "Improving Students' Ability in Writing Descrptive Text Using Genre Based Approach (GBA) at the Eight Grade Students of Smp Islam Terpadu Fitrah Insani" 3, no. April (2015): 38–52, https://scholar.google.co.id.

Descriptive writing paints a picture. In its pure form, nothing much happens. "Description" tells us what something looks like, feels like, tastes like, sounds like or smells like - without action or events.

3) Narrative

The narrative paragraph or essay tells a story, just like a narrator in a play (though it should be a true story, unlike a short story or a play). Narrative is a strory that tell about legend, myth, or fabel. It tells about fiction story.

4) Expository

Expository writing "exposes" or explains things about a subject. It is also sometimes called "information writing" because it gives information about a person, place, thing, relationship or idea. To accomplish that, it is best developed by the use of clear reasons, facts and statistical information, cause and effect relationships, or examples.

5) Recount

Recount is to tell past even for the purpose of informing or entertaining. It is usually found in journal, personal letter, bioghraphy, etc.

6) Letter Writing

Letter writing are formal letter, business letter, and personal letter.[22]

So there are some types of writing can be taught for students and to encourage their knowledge about types of writing. In this research the researcher focus on descriptive text as the genre to do the research.

f. Assesment of Writing

Writing assesment is important to measure the ability in writing wheter the students' ability good or bad, to see the skill of the students in writing, Hyland says that "assesment refers to the variety of ways used to collect information on learner's language ability achievment".[23] So, assesment is the way to measure the students' ability in writing.

There are some criterias to make scoring of students; writing ability as follows:

1) Grammar

Errors of grammar or wors order fairly frequent, occasional reading necessary for full comprehension.

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[22]Tossi Ana Ari Utami, "Improving the Ability in Writing Descriptive Text Through Brainstorming Technique" (Yogyakarta State University, 2014), https://scholar.google.co.id.

[23]Ken Hyland, *Second Language Teaching* (New York: Cambridge University Press, 2004), p.213, en.bookfi.net.

2) Vocabulary

Uses wrong ideas or inappropriate words fairly frequently, expression of ideas may be limited because of inadequate vocabulary.

3) Mechanics

Errors in punctuation or spelling fairly frequent, occasional re-reading necessary for full comprehension.

4) Fluency

Occasional lack of consistency in choice of structures and vocabulary which does not, however, impair overall ease of communication.

5) Organization

Some lack of organization, re-reading required for clarification of ideas.[24]

Here below scoring rubric to measure writing skill.

Table. 1
Scoring Writing Rubric adapted from C. Tribble

Item	Score	Criterion of scoring
Content	30-27	Excellent: knowledgeable-subtantive
	26-22	Good: some knowledge of subject-adequate range
	21-17	Fair: limited knowledge of subject little substance
	16-13	Very poor: does not show knowledge of subject non-

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[24] Arthur Hughes, *Testing for Language Teachers* (UK: Cambridge University, 2003), en.bookfi.net.

		substantive
Organization	20-18	Excellent: fluent expression-ideas clearly stated
	17-14	Good: somewhat choopy-loosely organized but main ideas stand out
	13-10	Fair: not fluent-ideas confused or disconnected
	9-7	Very poor: does not communicate-no organization
Vocabulary	20-18	Excellent: sophisticated range-effective word/idiom choice and usage
	17-14	Good: adequate range-occasional errors of word/idiom form, choice, usage, but meaning not obsecured
	13-10	Fair: limited range-occasional errors of word/idiom form, choice, usage
	9-7	Very poor: essentially translation-little knowledge of english vocabulary, idioms, word form
Grammar/ Language Use	25-22	Excellent: effective complex construction, few errors of agreement, tense.
	21-18	Good: effective but simple constructive in grammar.
	17-11	Fair: major problem is simple/complex construction in grammar
	10-5	Very poor: virtually no mastery of sentence construction rules
Mechanic	5	Excellent: demonstrates mastery of conventions
	4	Good: occasional errors of spelling, punctuation, capitalization
	3	Fair: frequent errors of spelling, punctuation, capitalization
	2	Very poor: no mastery of conventions, dominated by errors of spelling, punctuation, capitalization, paragraphing.[25]

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[25]C. Tribble, *Writing* (Oxford: Oxford University Press, 1996), p.130, en.bookfi.net.

Total Score	100

2. Writing Ability

Writing skill is necessary to be learned in learning English beside speaking. Although both of the skills are classified into the productive skills, writing contrastly is different from speaking. In speaking skill, the speakers use their voice such as pitch, stress, and rhythm to convey their ideas. Also the gestures and facial expression are needed to express the information clearly. Whereas, in writing skill, the writer have to rely on the words on the page to express their meaning.[26]

A writer also should consider some aspects in writing. For instances, knowing the purpose of writing wheter to explain something, amuse the readers from the stories, telling the past events or others. So, the readers will be easier to understand the information that are conveyed. On the other hand, the writer should has a good understanding about the content of writing such as the relevance to the topic discussed, clarity, originally, logic, and so on. It is committed to keep the writing on the track based on the topic and the reader will not be confuse about the information.

In order to be understadable to read the writing, the paragraph must flow easily from one sentence to the next sentence. The cohesion has the significant role in writing process. A paragraph can be said has a

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[26]Ann Raimes, *Techniques in Teaching Writing* (New York: Oxford University Press, 1983), p.4, en.bookfi.net.

cohesion if the sentence fulfill some requirements such as well structured between one sentence to other sentences, well linked together and there is no unnecessary repitition. T can be established by making logial and convenient cohesive devices used to link between sentences in a paragraph.

In addtion, coherence is also the important aspect in writing. The writer should write the sentences in the paragraph clearly and make the sentences connect to one another. Harmer adds that when the text is coherent, the reader can understand at least two things such as the writer's purpose and the writer's line or thought. [27] Therefore the coherence of the writing can be checked by using four ways. They are repeat the key nouns, use consistent pronouns, use transition signals to link the ideas, and arrange the writer's ideas in logial order.

Therefore, there are some aspects that should considered in writing ability. They are knowing the purpose of writing, having good understanding of topic of writing, having good comprehension about the content of writing.

3. Descriptive Text

a. Definition of Descriptive Text

One of writing types is descriptive text. Descriptive text is a piece of writing that is intended to convey meaning to the reader though sensory detail and provides image to the reader. According to

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[27] Jeremy Harmer, *How to Teach Writing* (Essex: Pearson Education Limited, 2004), kupdf.net.

Wilson and Burks stated that descriptive text is a form of writing which used to describe something looks like and create visual images of a particular place, person, or unit of times.[28] In addition Hywel stated that descriptive text is description of people, places, and things.[29] It is providing the details characteristic of people, animal, person, and place. Plogger stated that descriptive text is adding in details about the physical appearance of an object and describing the physical of the object by using sensory language, ideas, and concepts.[30] Descriptive text has purpose to describe about particular person, place and thing. Through this text the writer can show to the reader about physical appearance of something clearly.

Writing descriptive text is a process to gather our ideas, information or though become a text that describe a particular person, place or thing, it explains about a person, place or thing which can make the readers imagine what is described clearly.[31] So, it is important that the writer is able to give details of the object being described so that the readers can create a mental picture of the person, place, or object. It is important then that the writer makes used of words that elevate sensory details such as sight, sound, smell, taste,

[28] George E. Wilson & Julia M. Burks, *Let's Write English* (New York: Litton Educational Publishing, Inc, 1980), p.379.

[29] Muhammad Javed and Wu Xiao Juan, "A Study of Students' Assessment in Writing Skills of the English Language," *International Journal of Instruction* 6, no. 2 (2013): 132, https://www.academia.edu.

[30] Kathrine Plogger, *Simplified Paragraph Skills* (USA: NCT Publishing Group, 2000), p.241, en.bookfi.net.

[31] Sri Rahmadhani Siregar and Nursahara Dongoran, "Students ' Ability in Writing Descriptive Text," *English Journal for Teaching and Learning* 8, no. 1 (2020): 81–90, https://scholar.google.co.id.

feeling, and texture to create vivid images in the reader's mind. In addition, the writer must also be aware of spatial order in order to create a clear visual image of a person, place, object, or scene: 'the location or arrangement in space from top to bottom, bottom to top, right to left, left to right, near to far, far to near, inside to outside, or outside to inside'.[32]

From some definition above the researcher conclude that a descriptive text is a text to describe a person, thing, someone, or place. It is a text to inform the readers about the illustration of persons, places, or something in specific ways.

b. Purpose of Descriptive Text

The purpose of descriptive text is commonly to describe person, place, and thing. According to Smalley *et.al*, the purpose of descriptive text is describing people, places, things using modifiers as supporting details in the text, also using adverbs of place and adjective clauses in order to increase coherence and organize well the ideas into the text.[33] Moreover, the main purpose of a descriptive text is writing about an object so make the readers feel, hear, see, and taste the object.[34] It conclude that specifically descriptive text has purpose to

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[32]Elfa Kirana, Hermawati Syarif, and Desvalini Anwar, "Students ' Writing Ability in Descriptive Texts and Their Problems of Using Appropriate Adjective in SMP," 2018, 508–13.

[33]Regina Smalley, *Refining Composition Skills: Academic Writing and Grammar*, Sixth (Boston: Heinle Cengange Learning, 2012), p.52, en.bookfi.net.

[34]John Langan, *College Writing Skills with Readings* (New York: McGraw-Hill, 2001), p.175, en.bookfi.net.

describe place, thing, or person by special words like using adjective clause.

c. **Generic Structure of Descriptive Text**

The generic structure of descriptive text, according to Gerot and Wigne cited in Masitoh et.al journal, descriptive text has two main parts:

1) Identification

This part consists of the identification of a particular thing that being described. In general, the identification part answers two questions: What is the topic? And what is the text about?

2) Description

This part describes the parts also the characteristics of the object that being described. [35] It is contains more details explanation and description from the identification that has been described place, things, person, and animals.

d. **Language Feature of Descriptive Text**

According to Djamila, *et al*., the language features of descriptive text are stated below:

1) Using certain nouns, such as teacher, house, and bridge.
2) Using simple present tense
3) Detailed noun phrases to give information about a subject, such as it was a large open rowboat, a sweet young lady, the deaf person.

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[35]Siti Masitoh & Dasep Suprijadi, "Improving Students' Ability in Writing Descrptive Text Using Genre Based Approach (GBA) at the Eight Grade Students of Smp Islam Terpadu Fitrah Insani."

4) Various adjectives whch are describing, classifying, numbering, such as two strong legs, sharp white fangs, her black hair.
5) Relating verbs to give information about a subject, such as my mom is really cool, it has very thick fur, the rest remains at home.
6) Thinking verbs and feeling verbs to reveal the writer's view, such as the police believe the suspect is armed; I think it is a clever animal.
7) Action verbs, such as our new puppy bites our shoes; it eats soft food.
8) Adverbs to give additional information about manner, such as fast, gradually, at the three house.[36]
9) Figurative language, such as simile, metafor, e.g. John is white as chalk, sat tight.[37]

e. **Example of Descriptive Text**

This is the example of descriptive text:

Niagara Falls

Identification

Niagara Falls is a famous area of waterfalls. It is one of the most beautiful natural wonder of North America.

Description

It is on the Niagara River, about halfway between Lake Eric and Lake Ontario. The Niagara River forms part of the border between Canada and the United States. At Niagara Falls, Ontario, Canada is on one side of the river, and the U. S. State of New York is on the other side. Niagara Falls really has two waterfalls. The Horseshoe Falls in Canada, and the American Falls are in United States. The Niagara River drops into a steep gorge or canyon, at the falls. Most of the water flows over the Horseshoe Falls. They are not as high as the American Falls, but they are 2,600 feet (792 metres) wide-about 0.5 mile

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[36] Siti Ai Djamila, *Bahasa Inggris: Communicative English in Context* (Bandung: Grafindo Media Pratama, 2017), en.bookfi.net.
[37] Listianti, Training, and Faculty, "Improving Students ' Writing Skill in Descriptive Text Through Think-Pair-Share Strategy."

(0.8 kilometre). The American Falls are about 1,000 feet (305 metres) wide. Beyond the falls are the Whirpool Rapids. There, the powerful swrling water has carved a bowlout of the rock. At night, colored lights shine on the thundering falls. About 10 million people visit Niagara Falls each year.[38]

From those example it concluded that identification is the statement that will describe the object. While description describes the condition of the object, characteristic, location, weather.[39]

4. Jigsaw Technique

Jigsaw is one of types in cooperative learning. Cooperative learning is one form of learning based on constructivist understanding. Cooperative learning is a learning strategy with anumber of students as members of small groups whose ability levels differ. Cooperative learning comes from a cooperative word that means working things together by helping each other as a group or a team.[40] In cooperative learning there are another several types beside jigsaw, they are team pair solo, numbered head together, small group discussion, think-pair-share, STAD, and so on. But in this research the researcher just focus on jigsaw technique. Here are the definition about jigsaw, the procedure, advantages, and disadvantages.

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[38] Utami Widiati, Zuliati Rohmah, and Furaidah, *Bahasa Inggris*, 3rd ed (Jakarta: Kementerian Pendidikam dan Kebudayaan, 2017).

[39] Halimatus Sa'diyah, "Improving Students' Ability in Writing Descriptive Texts Through a Picture Series- Aided Learning Strategy" XL, no. 1993 (n.d.): 164–82, https://scholar.google.co.id.

[40] Isjoni, *Cooperative Learning Mengembangkan Kemampuan Belajar Berkelompok*, 3rd ed (Bandung: Alfabeta, 2014).

a. **Definition of Jigsaw Technique**

The jigsaw classroom originally developed by Elliot Aronson in 1971 in Austin, Texas, was considered effective in increasing positive educational outcomes. As a cooperative learning technique, it has been greatly studied abroad and has been explored in various ways by a number of researchers and teachers in classes of different levels and of different subjects.[41] Jigsaw technique is one type of cooperative learning. Cooperative means working together and helping each other as a team to solve the problem. The advantage of this technique is it can be applied to all of elements and subjects.

According to Aronson in Zahra, jigsaw technique is an efficient way to learn the course material in a cooperative learning style which encourages listening, writing, engagement and emphaty by giving each member of the group an essential part to play in the academic avtivity.[42] Jigsaw can be used in majority of subject-social studies, literature, and some parts of science- which all the materials written in the narrative or descriptive form.[43] As previously explained that the advantage of jigsaw technique can be apllied to all of elements and subjects. One of them is learning at school, for example learning English. From several studies it has been shown that the jigsaw

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[41]Q I A O Mengduo and J I N Xiaoling, "Jigsaw Strategy as a Cooperative Learning Technique : Focusing on the Language Learners" 33, no. Agustus (2010): 113–25.

[42]Retna Oktaviani Zahra, "The Use of Jigsaw Technique in Improving Students' Ability in Writing A Descriptive Text" 2, no. 1 (2014): 64–75, https://www.scholar.google.com.

[43] Muhammad Lukman Syafii, "Using Jigsaw Technique to Improve the Writing Ability of the Second Year Students of MTs Al-Islam Nganjuk," no. 1987 (2006), https://scholar.google.co.id.

technique can improve writing, speaking, and reading skills. Not only applied for learning English, this technique also can applied to mathematics, Agama Islam, and so on.

The jigsaw technique is a method of organizing classroom activity that makes students dependent on each other to succeed.[44] Kagan and Kagan explain in team jigsaw, each team becomes an expert on a topic, and then individuals from that team each teach another team.[45] The idea of jigsaw activities is not competition among learners in the classroom, rather cooperating with one another to complete assign task. Jigsaw creates cooperation by structuring student interdependency through the training task, instead of through grading system.[46] Jigsaw is said to be able to increase students' learning since it is less threatening for many students, increases the amount of student participation in the classroom.[47] The jigsaw technique is a grouping technique that emphasizes mutual trust. In this technique it is not taught the competetition but to work together and trust to each other. This technique can also invisibly increase the

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[44]Noor Hanim Rahmat, Pasir Gudang Campus, and Johor Bahru, "Exploring the Use of Jigsaw Writing Among ESL Writers: A Classroom Research" 1, no. July (2015), https://scholar.google.co.id.

[45]Spencer Kagan and Miguel Kagan, *Kagan Cooperative Learning* (Kagan Publishing, 2009), p.443, www.researchgate.net.

[46] Rifari Baron, "Employing Jigsaw in English Academic Writing: An Action Research in an EFL Class in Indonesia," *Research and Innovation in Language Learning* 2, no. September (2019): 228–36, https://scholar.google.co.id.

[47] Darmawan Budiyanto and Gaya Tridinanti, "The Influence of Jigsaw Technique and Writing Motivation on Business Letter Writing Achievment," *International Conference on Global Education VII "Humanishing Technology for IR. 4.0,"* no. 2 (2019): 1–2, https://scholar.google.co.id.

confidence of a quiet student in class to bring out all the knowledge he has.

According to Slavin in Kharisma says that jigsaw includes a procedure whereby students share information they have gathered with their group mates and with the other group mate in the class. Students are quizzed on all topics and the quiz scores are averaged to form team scores.[48] So, if the team wants to be successful, the team members must not only accomplish their subtasks but also do a good job of sharing information with their teammates.

In addition to Hedeen in Sedat Maden the home groups break apart, like pieces of jigsaw puzzle, and the students move into jigsaw groups consisting of members from the other home groups who have been assigned the same portion of the material. While in the jigsaw group, the students discuss their particular material to ensure that they understand it. Students then return to their home groups where they teach their material to the rest of their group. [49] Jigsaw techniques are devided into two, namely the home group and the expert group. In home group students have different materials, then they break up like jigsaw pieces and go to the expert group which has the same material to discuss, and then they return to the home

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[48] Kharisma Gustiningsih and Jauhar Helmie, "The Utilization of Jigsaw Technique to Improve Writing Ability in Teaching Report Text," *English Education*, 2016, https://scholar.google.co.id.

[49]Sedat Maden, "Effect of Jigsaw I Technique on Achievement in Written Expression Skill" 11, no. 2 (2011): 911–17, https://scholar.google.co.id.

group for sharing information they had obtained from the expert group.

Jigsaw as one of the cooperative learning help students to build the good relationship to the other group member. Students could state opinion freely without feeling they will judge for their opinion in their group and also in other group. It is also encourage students to be more active look for the information that are needed. It is because every group's member had their own task to accomplish which was counted as a contribution for the groups' achievment.[50] Jigsaw is one type of cooperative learning. Jigsaw is one technique to build responsible and good teamwork. It is also one of active learning to make students more interest in teaching writing, because they can share what they know to the others. In jigsaw technique there are two groups will be divided, they are expert group and home group. In home group, each students has the different material. After they write down their own material, then all students from home group gathered to form an expert group who has the same material. Later, each students go back to home group and share what have they discuss from expert group. This is the figure of jigsaw technique.

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[50] Sitohang and Purnawarman, "The Effectiveness of Jigsaw Strategy to Improve Students' Skill in Writing a Recount Text."

Figure. 1

Jigsaw Figure of Home Group and Expert Group
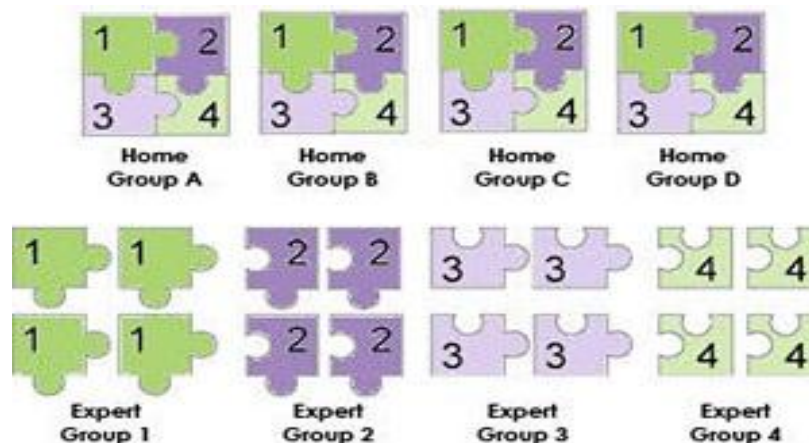
b. Procedure of Jigsaw Technique

Slavin explains that the teacher who uses this strategy

can follow the following procedures :

1) Provide structure: the teacher divides students in to home and expert groups,
2) Each student is assigned a sub- topic,
3) Ask expert group to search their sub-topic individually and this can be done through a closed or an open structure ,
4) Students meet with other experts researching the same sub-topic,
5) The teacher visits the groups to assist students in working together and making sure that the given information is accurate .
6) The students will teach each other , then return back to their home group to share information .
7) The teacher assesses students `understanding of the whole topic (i.e. test students understanding).
8) The teacher asks each group to solve a problem that requires students to synthesize what they have learned from the whole topic.
9) At the end students are able to reflect on what have been and what level of improvements they have made.[51]

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[51]Mohammed, "Using Jigsaw Cooperative Learning Strategy to Improve The EFL Iraqi Students in Writing Skill."

While According to Aronson, the teaching procedures in English classroomby Jigsaw might be sequenced as follows:

1) Students are divided into 5 or 6 persons of a Jigsaw group. The group should be diverse in terms of ethnicity, gender, ability, and race.
2) One student should be appointed as the group leader. This person should initially be the most mature student in the group.
3) The day's lesson is divided into 5-6 segments (one for each member). For example, if you want history students to learn about Eleanor Roosevelt, you might divide a short biography of her into stand-alone segments on: (a) Her childhood, (b) Her family life with Franklin and their children, (c) Her life after. Franklin contracted polio, (d) Her work in the White House as First Lady, and (e) Her life and work after Franklin's death.
4) Each student is assigned one segment to learn. Students should only have direct access to only their own segment.
5) Students should be given time to read over their segment at least twice to become familiar with it. Students do not need to memorize it.
6) Temporary experts groups should be formed in which one student from each Jigsaw group joins other students assigned to the same segment. Students in thisexpert group should be given time to discuss the main points of their segment and rehearse the presentation which they are going to make to their Jigsaw group.
7) Students come back to their Jigsaw group.
8) Students present his or her segment to the group. Other members are encouraged to ask question for clarification.
9) The teacher needs to observe the process from group to group. Intervene if any group is having trouble such as a member being dominating or disruptive. There will come a point that the group leader should handle this task. Teacher can whisper to the group leader as to how to intervene until the group leader can effectively do it themselves.
10) A quiz on the material should be given at the end so students realize that the sessions are not just for fun and games, but that they really count.[52]

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[52] Bafadal and Rafika, "The Effectiveness of Jigsaw Technique in Teaching Writing Descriptive Text."

The procedure based on Slavin are provide students means divided the students into home group and along with expert group. Then, each students receives a sub-topic. Everyone in expert group learn and find out the information as much as possible consists to their sub-topic. Each students is responsible for the sub-topic they receive. Next, students meet each expert that have the same sub-topic and discuss it together. After discuss it, the teacher ask the students to return back to their home group, and share the information to everyone in home group. The teacher assesses students' understanding for whole the topic. At the end, the students are able to reflect what they have learned to improve their ability.

While based on Aronson the procedure are divided students into 5 or 6 groups, every groups consist of five person. Each students get the different material, for example the topic about Eleanor Roosevelt, so every students get the sub-topic suc as (1)her childhood, (2) her family life with Franklin and their children, (3) her life after Franklin contracted polio, (4) Her work in the white house as first lady, and (5) her life and work after Franklin's death.

Every students are responsible for their material/ sub-topic. The first group called home group. Next, if the students have received the material, the teacher ask the students to grouping with the students that have the same material. This group called the expert group. In the expert group the students discuss together and find out more

information about the material/ sub-topic they get. After that, the

students return back to their home group. In home group, each

students take turns to provide the information. And the last, the

teacher give a quiz consist of material to assess how far the students

understand about the material. In this research, the researcher used the

procedure from Elliot Aronson to apply in the classroom.

c. **Advantage of Jigsaw Technique**

Lucas states that Jigsaw provides students with thefollowing

advantages :

1) Jigsaw technique provides students with the opportunity to be active and enjoy learning.
2) Students gradually will feel comfortable with multiple exposure to jigsaw strategy .
3) Jigsaw technique increases the competition among students to share information and knowledge .
4) The active students may help the non-active classmates to learn the material thoroughly .
5) Jigsaw technique includes two different practices the first is to assist learning and the second is to develop cooperation among students .
6) Jigsaw technique creates positive learning environment and implies mere individual responsibility as well as it encourages cooperation and peer teaching.
7) Jigsaw technique can be integrated in to a number of classrooms activities that are structured so that everyone doesn't have to read the entire work .
8) Jigsaw technique is adaptable to a wide variety of curricular settings and teachers will find it useful in a number of respects .
9) The success of each group depends on the other participation of each individual in completing their tasks. This means jigsaw strategy effectively increases the involvement of each student in the activity.[53]

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[53]Mohammed, "Using Jigsaw Cooperative Learning Strategy to Improve The EFL Iraqi Students in Writing Skill."

As Lucas in Jassim say there are several advantage of jigsaw technique, including this technique encourages students to be more active and feel enjoy while learning. Jigsaw also increase students' responsibility to share information and knowledge to each other. All students work together and solve the problem together in which may make unified concepts easier to understand. Every students freely out to share his/her knowledge because everyone in this technique is an expert.

d. Disadvantage of Jigsaw Technique

Hedeen explains some disadvantages of jigsaw technique :

1) Jigsaw technique takes much time to organize the group. The teacher should make groups that combine the students who have different intelligences.
2) The class situation become noisy,so the teacher needs to control the students.
3) If the group setting is too big it will make the group less effective in working among the members .
4) If students don't get to write their initial tasks quickly enough , it will run out of time.
5) If the Jigsaw structure is somewhat complex it may be best applied when the students are comfortable with group work.
6) There are high expectations and responsibilities placed on the students.[54]

Although there are many advantages of the jigsaw technique but this technique also has some disadvantage, according to Heeden in Jassim there several disadvantage of jigsaw tehnique where jigsaw technique is take too much time when the teacher organize the group. If the class have the large number it is not become effective, and the

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[54]Mohammed.

class become noisy, so the teacher must be able to control students well.

e. Teaching Descriptive Text by Using Jigsaw Technique

Before the students do the procedure in jigsaw technique, first of all the teachers explain the concept of what is jigsaw technique along with the benefits students get. Here, the following is steps in teaching descriptive text using jigsaw technique:

1) Pre-Teaching

   a) Teacher explain the social function, generic structure, and language feature of descriptive text.

   b) Teacher give an example to the students.

   c) Let the students to ask some question what they have not understood about descriptive text.

2) While Teaching

   a) The teacher divides the students into five to six groups. A group consists of five to six students.

   b) The teacher share flash card with different number and color and also different materials.

   c) The teacher explain the procedure of jigsaw technique. The first group is called "home group"

   d) The teacher ask the students to break and grouping into students who have the same color, number and materials. It called "expert group"

e) The teacher ask the students to discuss and teach each other based their own material.

f) The teacher ask the students return to their home group.

g) Finally, every students from expert group explain the material that they have discussed before.

3) Post-Teaching

a) The teacher and the students conclude the lesson that has been learnt.

b) The teacher informs the topic lesson for next meeting.

Those are the procedures of jigsaw technique in teaching descriptive text that will be used by the researcher in experimental class at Grade X MAS Darul Ulum Sipaho Pemadu.

f. Conventional Strategy

Conventional Strategy is a traditional way that is used by a teacher in teaching and learning process. Conventional strategy is the strategy used by teachers based on mutual agreement in a school. At MAS Darul Ulum Sipaho the teacher used scientific approach as the strategy in teaching and learning process. There are five procedure of teaching by using scientific approach, they are observing, questioning, exploring, associating, and communicating. The teaching procedures in teaching writing descriptive text at MAS Darul Ulum Sipaho:

1) The teacher explain about definition, social function, generic structure, and language feature of descriptive text.

2) The teacher ask the students to read the example of descriptive text "Niagara Falls" in their text book.

3) The teacher ask the students to pay attention to the generic structure and language feature of descriptive text.

4) The teacher and the students analysis the example together.

B. Review of Related Findings

There were some researcher that have been used jigsaw method for teaching writing skill. Related to this research, some researchers had been done as follows:

First, Nita Aprianti, et.al, in their research concluded that jigsaw is effective to used in teaching writing descriptive text. The result showed t-test result 4.690 was higher than t-value 2.042. This technique also encourage three aspects of scoring i,e. grammar, content, and organization.[55] It means jigsaw technique can improve students' writing skill.

Second, Fauzi Bafadal & Rafika, in their research concluded that jigsaw technique is effective in teaching writing descriptive text. The mean score of experimental group was 13.3 and the mean score of control group was 7.2. The researcher got score 2,042 for confident level 0.05 or 95% and score

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[55]Aprianti, Nita, Albert Rufinus, "The Effective Use of Jigsaw in Teaching Descriptive Text Writing."

2,750 for confident level 0.01 or 99%.[56] So, the aplication of jigsaw technique is effective and efficient.

Third, Jetti Lamtiar Napitupulu in her research showed that there was the achievment in writing descriptive text after applying jigsaw technique. The calculation shows that t-observed (5.111) was higher than t-table (2.001).[57] So the application of jigsaw technique is successful.

Fourth, Nofi Herlina used jigsaw technique in writing narrative essay. In her research concluded that there was significant different between students' ability in writing narrative essay being taught by using jigsaw technique and conventional technique. The calculation shows that t-observed (6.030) is bigger than t-table either at 5%= 2.00 or 1%= 2.65.[58]It shows that there was significant effect of using jigsaw technique toward students' ability in writing narrative essay.

Fifth, Retna Oktaviani Zahra in her research concluded that there was the improvement of students' writing a descriptive text by using jigsaw technique. The instruments used were pre- test, post-test, and questionnaire of attitudes towards the jigsaw technique. The post-test scores of the two groups were compared by using Independent t-test. The results showed the

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[56] Bafadal and Rafika, "The Effectiveness of Jigsaw Technique in Teaching Writing Descriptive Text."

[57]Jetti Lamtiar Napitupulu, "The Effect of Jigsaw Technique on Students' Achievment in Writing Descriptive Text" (State University of Medan, 2015), http://digilib.unimed.ac.id.

[58]Nofi Herlina, "The Effect of Using Jigsaw Technique Toward Students' Ability in Writing Narrative Essay at The Second Year Students of SMP Negeri 1 Bangkinang of Kampar Regency" (State Islamic University of Sultan Syarif Kasim Riau, 2012), https://repository.uin-suska.ac.id.

significance value was lower than the significance level which was 0.043 < 0.05.[59] It means that the jigsaw technique improve students' writing ability.

Sixth, Iranita Sitohang used jigsaw technique to students' skill in writing recount text. Based on her research, the mean of writing score of experimental group increased 21.07 point from 56.07 to 77.14. While control group mean point in which does not receive because the learning strategy only increased 0.36 point, from 65.00 to 65.36[60] It means that jigsaw technique can improve students' skill in writing recount text.

The sixth related findings above conclude that jigsaw technique is significant with writing skill, not only to improve the ability in writing a descriptive test but also improve the ability in writing narrative text and recount text. While this technique can improve students' writing ability its also make students enjoy in writing. So, the researcher will applicate jigsaw technique to improve their writing and make students enjoy in writing skill and this research will complete and contribute previous finding.

C. Conceptual Framework

The purpose of writing is to express an idea, feeling, and thingking. In writing, students must have good in thinking so that they easy to write down their ideas. Students must confident and not shy to express their ideas. Teacher must choose suitable method or technique for the students to make them easier in practice their writing.

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[59]Retna Oktaviani Zahra, "The Use of Jigsaw Technique in Improving Students' Ability in Writing A Descriptive Text (A Quasi-Experimental Research at One Senior High School in West Bandung)," *Journal of English Education* 2, no. 1 (2014): 64–75, https://ejournal.upi.edu.

[60] Sitohang and Purnawarman, "The Effectiveness of Jigsaw Strategy to Improve Students' Skill in Writing a Recount Text."

In this case, the researcher use jigsaw technique to solve the problem. The researcher would use jigsaw technique to experimental class and conventional method to control class. After that the researcher give post-test to students about their writing ability to both class. Then, the researcher compare the writing result of pre-test and post test

Figure. 2
Conceptual Framework

Students problems are:
1. The students are not able to express their idea.
2. The students are lack in vocabulary.
3. The students are lack in understanding grammar.
4. The students assume that writing is boring.

Jigsaw Technique

Pre Test

Experimental class with treatment

control class with conventional strategy

Post Test

H_0

H_a
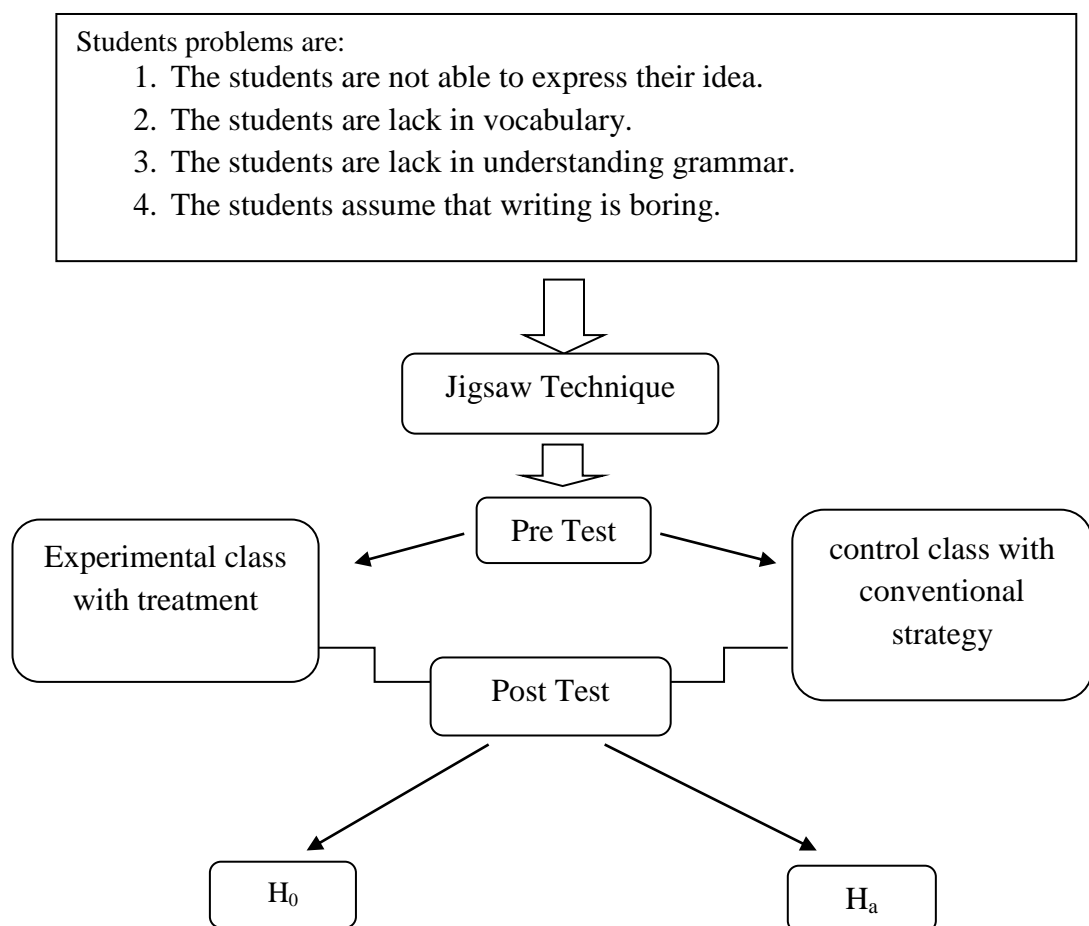
D. Hypothesis

The hypothesis in this research are:

1. There is a significant effect of using jigsaw technique to students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu. (H_a)

2. There is no significant effect of using using jigsaw technique to students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu.(H_0)

CHAPTER III

RESEARCH METODOLOGY

A. Place and Time of Research

The research has been conducted at MAS Darul Ulum Sipaho Pemadu. It is located in Jl. Gunungtua- Langga Payung km. 22,5 Desa Sipaho, Kecamatan Halongonan, Kabupaten Padang Lawas Utara. It was done from June 2020 up to October 2020.

B. Research Design

The kind of this research is quantitative research with experimental method in this research. The researcher used two classes, experimental class and control class. The experimental class is the class that thought with jigsaw technique. Meanwhile the control class is the class that taught by using conventional strategy.

Based on using control and experimental class, the research design that is used 'true experimental design'. The design which used is Pretest-Posttest Control Group Design. The pretest-posttest control group design different treatment, and both groups are posttested at the end of the study. Posttest scores are compared to determine the effectiveness of the treatment.

Table. 2
Research Design

Class	Pre-test	Treatment	Post-test
Experimental Class	√	√ Jigsaw	√
Control Class	√	×	√

C. Population and Sample

1. Population

The population of this research were all the grade X students of MAS Darul Ulum Sipaho Pemadu that consist of 91 students divided into three classes. It can be seen from the table follow:

Table. 3

Population of the Research

No	Class	Students
1	X-IPA	30
2	X-IPS[1]	28
3	X-IPS[2]	33
TOTAL		91

2. Sample

In this research, the researcher took two classes as a sample. The classes are devided into experimental class and control class. The research used random sampling to take the sample. The researcher chooses X-IPA consists of 30 students as the experimental class and X-IPS[1] consists of 28 students as control class.

Samples of the research

Experimental Class	Control Class
X-IPA = 30	X-IPS[1] = 28
Total = 58	

D. Instrument of Collecting Data

    Instrument is a toll that can be use by the researcher to collect the valid and reliable data.In this research, the researcher gave the test based on the indicator of writing. Indicator of writing has five indicators, they are: content, mechanic, vocabulary, grammar, Organization. From the indicators, the researcher gave the writing test to students either for post-test and pre-test. The experimental class by using jigsaw technique and control class using conventional strategy. In this research, the researcher used the test as the instrument to collect the data. The test is essay test. The test is writing descriptive text with one topic to identify students' ability in writing.

Table. 4
Indicator of Writing

Indicators	Score	Criteria
Content	4	EXCELLENT: knowledge able substantive, development of thesis or topic relevant to assign topic.
	3	GOOD: some knowledge of subject, adequate range, limited development thesis, mostly relevant to topic but lack detail.
	2	FAIR: limited knowledge of subject, little substances, and inadequate development of the topic.
	1	POOR: doesn't shoe knowledge, not pertinent, or not enough to evaluate.
Mechanic	4	EXCELLENT: demonstrated mastery of conventions, few errors spelling, punctuation, capitalization, paragraphing.
	3	GOOD: occasional errors of spelling, punctuation, capitalization, paragraphing, but meaning not obscured.
	2	FAIR: frequent errors of spelling, punctuation, capitalization, paragraphing

		poor hand writing, meaning confused or obscured
	1	POOR: no mastery of conventions, dominated by errors of spelling, punctuation, capitalization, paragraphing, hand writing illegible, or not enough to evaluate.
Vocabulary	4	EXCELLENT: sophisticated range, effective word or idiom choice and usage word from mastery, appropriate register.
	3	GOOD: adequate range, occasional error of word or idiom choice and usage, meaning confused or obscured.
	2	FAIR: limited range, frequent error of word or idiom choice and usage, meaning confused or obscured.
	1	POOR: essentially translation, lit
Grammar	4	EXCELLENT: effective complex construction, few errors of agreement, tense number, word order/function, articles, pronoun, preposition.
	3	GOOD: effective but simple construction, minor problem in a simple construction, several errors of agreement, tense number, word order/function, articles, pronoun, preposition but meaning seldom obscure.
	2	FAIR: major problem in complex/ simple construction, frequent error of negation, agreement, tense number, word order/function, articles, pronoun, preposition, and fragments, run-ons, deletions, meaning confused, or obscured.
	1	POOR: virtually not mastery of sentences construction rules, domination by errors, does not communicate, or not enough to evaluate.
	4	EXCELLENT: fluent expression, ideas clearly stated / support, well organized, logical sequencing, cohesive and correct the generic structure of descriptive text
	3	GOOD: somewhat copy, loosely organized, but main idea stand out, limited support, logical but in complete sequencing and correct the generic

Organization		structure of descriptive text.
	2	FAIR: not fluent, ideas confused or disconnect, lacks logical, sequencing and development and still incorrect to arrange the generic structure of descriptive text.
	1	POOR: doesn't to communicate, no organization or not enough to evaluate.

E. Validity And Reliability Instrument

A good test must have validity. So the test can be used to measure the aspects that will be measured. In this case, the researcher uses construct validity. In this research, the researcher used construct validity to get the validity of instrumentation. Construct validity is a part of the test as a totality to measure the test by content. There are 2 valid essay tests that will be given by the researcher. One question for pre-test and one question for post-test.

Another requirement is also important for a researcher is reliability. The result of the research must be reliable. Reliability means the result of the test has similarity. A research instrument is said to have a high reliability value, if the tests are made to have consistent results in a measure that would be measured.

Construct validity and reliability are a test validity based on the judgment of the experts. In this case, expert gives opinion about the instrument, whether instrument can be used or still need improving, or maybe the instrument is failed to be used. The researcher used essay test to test the students' writing procedure text ability. In this research, scoring

criteria is based on five aspects of writing assessment; content, organization, language use, vocabulary and mechanics.

F. Procedure of Collecting Data

In this research, the researcher collected the data by using pre-test, treatment and post-test.

a. Pre-test

1) The researcher administrated essay test to the students along with the answer sheet. The researcher administrated it to control class and also experimental class.

2) The researcher explain what students are going to do. The researcher asked the students to describe the destination that they have been visit.

3) The researcher gave the time to finish it.

4) The researcher collected the answer sheet.

5) The researcher checked the answer sheet and count the students' score to measure students' writing ability of descriptive text.

b. Treatment

The researcher gave the treatment for experimental class by using jigsaw technique. The researcher gave the instruction how is the procedure of jigsaw technique. While for control class there was no treatment. In control class the researcher used the teacher's technique of the school.

c. Post-test

After the researcher do the treatment, the last step is post test. In this part, the researcher gave the test for both of class (experimental class and control class). Here are the proedure of post test as follow:

1) The researcher administrated the final test about descriptive text for experimental class and control class.

2) The researcher explained the instruction to the students.

3) The researcher gave time to answer it.

4) The researcher collected the test.

5) The researcher checked to measure the students' ability in writing descriptive text which use jigsaw technique and nor using jigsaw technique.

G. Technique of Data Analysis

To analyze the data, the researcher used "t" test. "T" test is one of statistic examine the difference two variable. The analysis of data is done to find out the ability of the two groups that have been divided in to experimental and control class.

In this research, the researcher used the technique of data analysis as follow:

a. Mean score

To know the mean score of data, the researcher used formula as follow:

$$M_X = \frac{\Sigma f x N}{}$$

Where:

M_x = mean

Σfx = total scores

N   = number of classes

b. Normality Test

Normality test is used to know whether the data of research is normal or not. To know Normality test is used to know whether the data of research is normal or not. To know the normality, the researcher uses *Chi- Square* formula. The formula is follow:[61]

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

Where:

x^2 = Value of Chi- Square

f_0 =Observed Frequency

f_h =Expected Frequencye

To Calculate the result of *Chi- Square,* it is used significant level 5% (0,05) and degree of freedom is (dk=k-1). If result, the data is distributed normal.

c. Homogenity 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 is can be called homogenous. Homogeneity is the similarity of

[61] Ahmad Nizar Rangkuti, *Statistik Untuk Penelitian Pendidikan* (Medan: Kelompok Penerbit Perdana Mulya Sarana, 2015), p.74.

variance of the group will be compared. So, thefunction of homogeneity test is to find out whether the data homogeny or not. It use Harley test, as follow:[62]

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

The hypothesis is accepted if $F_{count} \leq F_{table}$

The hypothesis is rejected if $F_{count} \geq F_{table}$

The hypothesis is rejected if $F \leq F \frac{12}{} \alpha (n_1-1) (1= n_2-1)$, while if $F_{count} > F_{table}$ hypothesis is accepted. It determined with significant level 5% (0,05) and dk numerator was (n_1-1), while detominators is (n_2-1).

d. Hypothesis test

Hypothesis was the provisional result of the result. Based on the hypothesis, the analysis of the data will be done to find out the ability of two groups that have been divided into experimental class and control class. The hypothesis is to answer the result of the research. So, the data will be analyzed by using the *t-test*formula:[63]

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

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[62]Agus Irianto, *Statistik Konsep Dasar Dan Aplikasinya* (Padang: P2LPTK Departemen Pendidikan Nasional, 2003), p.276.

[63]Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik* (Jakarta: Rineka Cipta, 2013), p.31.

T	: The value which the statistical significance
M_1	: The average score of the experiment class
M_2	: The average score of the control class
$X_1{}^2$	: Deviation of the experiment class
$X_2{}^2$	: Deviation of the control class
n_1	: Number of experiment class
n_2	: Number of control class

If t-test is higher than t_{table}, the researcher can conclude that h_a is accepted and h_o is rejected. It means that there is significant effect of using jigsaw technique on students' ability in writing descriptive text at grade X MAS Darul Ulum Sipaho Pemadu. If t-$_{test}$ is lower that t_{table} the researcher can conclude that h_a is rejected and h_o is accepted. It means that there is no significant effect without using jigsaw technique on students' ability in writing descriptive text at grade X MAS Darul Ulum Sipaho Pemadu.

CHAPTER IV

RESULT OF THE RESEARCH

Researcher shows the data description from the data analysis which was calculated from sample of the data. The data was found from the control class and the experimental class in MAS Darul Ulum Sipaho Pemadu. The researcher conducted this research by using pre-test to know the students' writing ability and the students tested by conducting post-test to know the students' writing ability in descriptive text after giving treatment in experimental class. It was applied by using jigsaw technique to help students to affect their writing especially in descriptive text. Then, the researcher used t-test to know wheter the students' writing ability after using jigsaw technique affected or not from hypothesis. The data will be shown as below:

A. **Description of The Data**

1. **Description of The Data before Jigsaw Technique**

a. **Score of Pre-test Experimental Class**

As experimental class, the researcher took X-IPA class which is consist of 30 students. The researcher gave the pre-test to the students. The students wrote descriptive text with the topic about "tourism place" that have visited by them. Based on the students' answers in the pre-test, the researcher calculated the students' score. It can be seen on appendix 5 and 6. The pre-test score of experimental class can be seen as table below

Table. 5
Score of Experimental Class in Pre-test

Descriptive	Statistic
Total score	1525
Highest score	70
Lowest score	35
Mean	48,12
Median	50,25
Modus	49,5
Range	35
Interval	6
Standard deviation	9,24
Variant	81,178

Based on the table above, the total score of experimental class in pre-test is 1525, the highest score is 70. The lowest score is 35, mean is 48,12, median is 50,25, modus is 49,5, range is 35, interval is 6, standard deviation is 9,24, and variant is 81,178. Then the calculation of the frequency distribution of students' score in experimental class can be applied into table frequency distribution below:

Table. 6
Frequency Distribution of Experiment Class (Pre-test)

No.	Interval	Mid-point	F	Percentages
1.	35-40	37,5	5	16,6%
2.	41-46	43,5	5	16,6%
3.	**47-52**	**49,5**	**8**	26,6%
4.	53-58	55,5	5	16,6%
5.	59-64	61,5	4	13,3%
6.	65-70	67,5	3	10%
$i = 6$		-	30	100%

From the table above, it can be seen that interval 35 up to 40 are 5 students (16,6%), 41 up to 46 are 5 students (16,6%), 47 up to 52 are 8 students (26,6%). 53 up to 58 are 5 students (16,6%), 59 up to 64 are 4 students (13,3%), and 65 up to 70 are 3 students (10%). It can be

concluded that the biggest frequency is in interval 47 up to 52 and the lowest frequency is in interval 65 up to 70.

To make the description of the data is clearer the researcher presented them in histogram on this following figure:
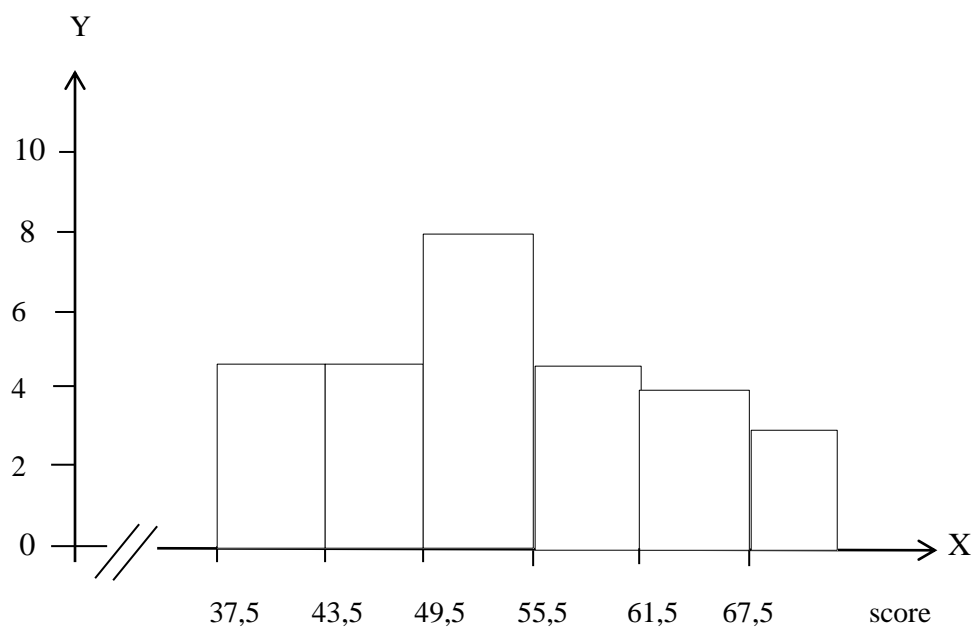
Figure 3: Description Data Pre-test of Experimental Class

b. Score of Pre-test Control Class

In pre-test of control class, the researcher gave test to the students. Then, the researcher calculated the result that has been gotten by the students in answering the essay test. The score of pre-test control class can be seen as table below:

Table. 7
Score of Control Class in Pre-test

Descriptive	Statistic
Total score	1510
Highest score	75
Lowest score	35
Mean	50,04
Median	53,12
Modus	52,28
Range	40
Interval	7
Standard deviation	10,85
Variant	130,291

Based on the table above, the total score of control class in pre-test is 1510. The highest score is 75. The lowest score is 35, mean is 50,04, median is 53,12, modus is 52,28, range is 40, interval is 7, standard deviation is 10,85, and variant is 130,291. Then the calculation of the frequency distribution of students' score in control class can be applied into table frequency distribution below:

Table. 8
Frequency Distribution of Experiment Class (Pre-test)

No.	Interval	Mid-point	F	Percentages
1.	35-41	38	5	17,85%
2.	42-48	45	3	10,71%
3.	**49-55**	**52**	**9**	32,14%
4.	56-62	59	4	14,28%
5.	63-69	66	4	14,28%
6.	70-76	73	3	10,71%
$i = 7$		-	28	100%

From the table above, the students' score from 35 up to 41 are 5 students (17,85%), 42 up to 48 are 3 students (10,71%), 49 up to 55 are 9 students (32,14%), 56 up to 62 are 4 students (14,28%), 63 up to 69 are 4 students (14,28%), and 70 up to 76 are 3 students (10,71%). It

can be concluded that most of students are in interval 49-55 have 9 students.

In order to get description of the data clearly and completely, the researcher presented them in histogram on the following figure:
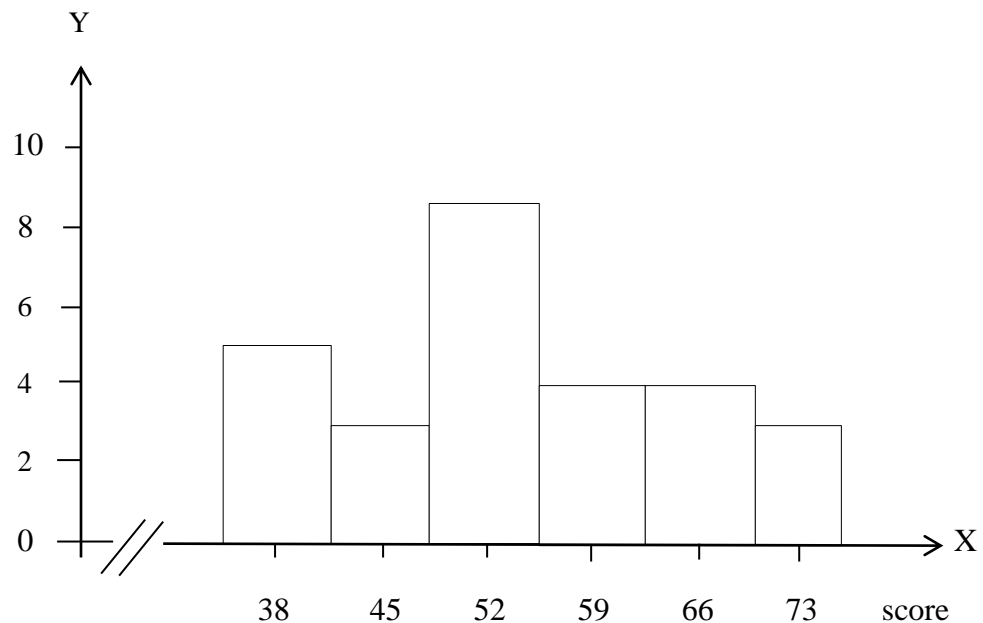
Figure 4: Description Data Pre-test of Control Class

2. Description Data after Using Jigsaw Technique

a. Score of Post-test Experimental Class

After the researcher gave the test in post, the researcher calculated the result that has been gotten by the students' answering in the test after the researcher did the treatment by using jigsaw technique. It can be seen in the following table:

Table. 9
Score of Experimental Class in Post-test

Descriptive	Statistic
Total score	2005
Highest score	85
Lowest score	45

Descriptive	Statistic
Mean	71,31
Median	67,25
Modus	66,9
Range	40
Interval	7
Standard deviation	11,2
Variant	124,971

Based on the table above, the total score of experimental class in post-test is 2005. The highest score was 85. The lowest score is 45, mean is 71,31, median is 67,25, modus is 66,9, range is 40, interval is 7, standard deviation is 11,2, and variant is 124,971. It can be seen on appendix 8 and 9. Then, the calculation of the frequency distribution of the students' score experiment class can be applied into table frequency distribution below:

Table. 10
Frequency Distribution of Experiment Class (Post-test)

No.	Interval	Mid-point	F	Percentages
1.	45-51	48	5	16,6%
2.	52-58	55	1	3,33%
3.	59-65	62	7	23,3%
4.	**66-72**	**69**	**8**	26,6%
5.	73-79	76	4	13,3%
6.	80-86	83	5	16,6%
	$i = 7$	-	30	100%

Based on the table above, the students' score from interval 45 up to 51 are 5 students (16,6%), 52 up to 58 is 1 students (3,33%), 59 up to 65 are 7 students (23,3%), 66 up to 72 are 8 students (26,6%), 73 up to 79 are 4 students (13,3%), and 80 up to 86 are 5 students (16,6%).

To make the description of the data clearly, the researcher presented them in histogram as follow:
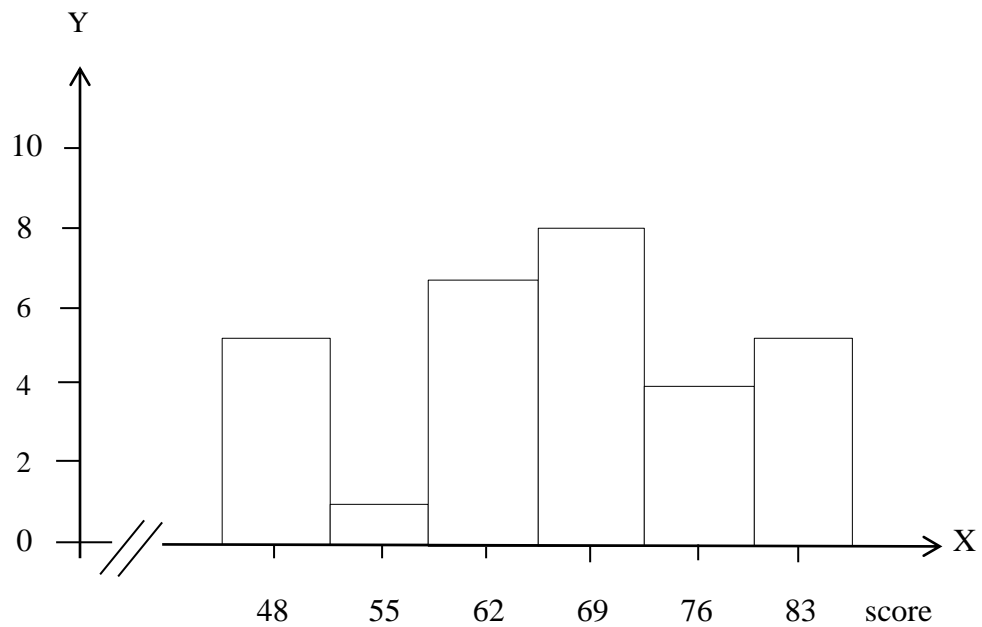
Figure 5: Description Data Post-test of Experimental Class

b. Score of Post-test Control Class

The researcher took X-IPS[1] as the control class. The result that has been gotten by the students' answering in the test after the researcher taught the writing descriptive text by using conventional strategy. It can be seen in the following table:

Table. 11
Score of Control Class in Post-test

Descriptive	Statistic
Total score	1705
Highest score	75
Lowest score	35
Mean	57,81
Median	60,75
Modus	59,49
Range	40

Descriptive	Statistic
Interval	7
Standard deviation	10,43
Variant	115,707

Based on the table above, the researcher get total of score is 1705, the highest score is 75, the lowest score is 35, mean is 57,81, median is 60,75, modus is 59,49, range is 40, interval is 7, standard deviation is 10,43, and variant is 115,707. Then, the computed the frequency distribution of the students' score of control class can be applied into table below:

Table. 12
Frequency Distribution of Control Class (Post-test)

No.	Interval	Mid-point	F	Percentages
1.	35-41	38	2	7,14%
2.	42-48	45	2	7,14%
3.	49-55	52	4	14,28%
4.	**56-62**	**59**	**8**	28,57%
5.	63-69	66	5	17,85%
6.	70-76	73	7	25%
	$i = 7$	-	28	100%

From the table above, it can be seen that the interval 35 up to 41 are 2 students (7,14%), 42 up to 48 are 2 students (7,14%), 49 up to 55 are 4 students (14,28%), 56 up to 62 are 8 students (28,57%), 63 up to 69 are 5 students (17,85%) , and 70 up to 76 are 7 students (25%).

For the clear description of the data, the researcher presented them in histogram on the following figure:
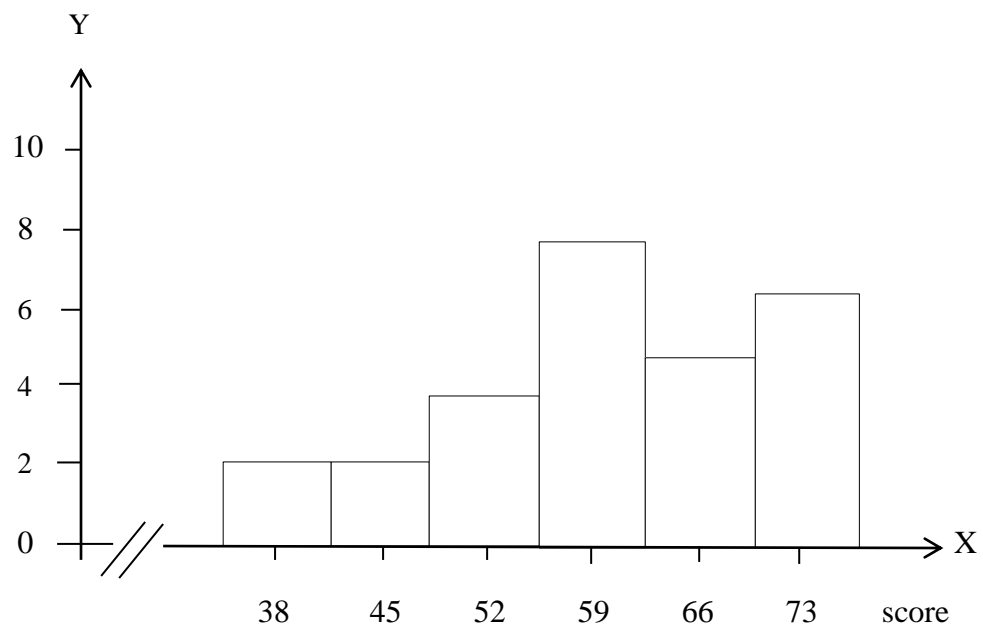
Figure 6: Description Data Post-test of Control Class

B. Hypothesis Test

The researcher used parametic test by using T-test to analyze the hypothesis. After calculated the data of post-test, the researcher has found that post-test result of experimental class and control class is normal and homogenous. Hypothesis of the research was "there is the effect of jigsaw technique towards students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu", the calculation can be seen on appendix 11 and 12. The result of t-test was as follow:

Table. 13
Result of T-test from the both average

Pre-test		Post-test	
t_{count}	t_{table}	t_{count}	t_{table}
-0,768	1,67252	5,037	1,67252

The hypothesis test are two criteria. They are if $t_{count} < t_{table}$, H_0 is accepted and if $t_{count} > t_{table}$, H_a is accepted. Based on researcher calculation in pre-test, the researcher found that t_{count} -0,768 while t_{table} 1,67252 with opportunity $(1-\alpha) = 1-5\% = 95\%$ and $dk = n_1 + n_2 - 2 = 30 + 28 - 2 = 56$. Cause $t_{count} < t_{table}$ (-0,768 < 1,67252), it means that hypothesis H_a was rejected and H_0 was accepted. So in, pre-test, the two classes were same. There is no difference in the both of classes. But in post-test, the researcher found that t_{count} 5,037 while t_{table} 1,67252 with opportunity $(1-\alpha) = 1 - 5\% = 95\%$ and $dk = n_1 + n_2 - 2 = 30 + 28 - 2 = 56$. Cause $t_{count} > t_{table}$ (5,037 > 1,67252), it means that hypothesis H_a was accepted and H_0 was rejected. So, there is significant effect of jigsaw technique towards students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu. In this case, the mean score of experimental class by using jigsaw technique was 71,31 and mean score of control class by using conventional strategy was 57,81. The gain score was 15,42. The calculation can be seen in the following table:

Table. 14
Gain Score of Experimental Class and Control Class

Class	Pre-test	Post-test	Enhancement	Gain score
Experimental	48,12	71,31	23,19	15,42
Control	50,04	57,81	7,77	

C. Discussion

Based on the related finding, the researcher discussed and compared with finding. It also discussed with theory that has been stated by researcher. Jigsaw as one of the cooperative learning help students to build the good relationship to the other group member. Students could state opinion freely without feeling that they will judge for their opinion in her/his group and also in other group. It also encourages students to be more active look for the information that are needed. It because every group's member had their own task to accomplish which was counted as a contribution for the groups' achievement.

By seeing the data analysis, the researcher found the use of jigsaw technique was effective in teaching writing descriptive text. This strategy made good effect for students' writing ability in descriptive text. The researcher found that the mean score of students' writing ability before using jigsaw technique was 48,12 and after using jigsaw technique was 71,31. It meant there was the effect of using Jigsaw Technique towards students' writing ability.

The result above supported the previous research by some researchers. First, Fauzi Bafadal & Rafika, in their researcher showed the mean score of experimental group was 13.3 and the mean score of control group was 7.2. The researcher got score 2,042 for confident level 0.05 or 95% and score

2,750 for confident level 0.01 or 99%.[64]It means that using jigsaw technique in teaching writing descriptive text is effective.

Second, Nofi Herlina in her research concluded that there was the effect of jigsaw on students' writing skill. The calculation shows that t-observed (6.030) is bigger than t-table either at 5%= 2.00 or 1%= 2.65.[65]It shows that there is significant effect of using jigsaw technique toward students' ability in writing.

Third, Nita Aprianti, et.al, in their research concluded that there was the improvement of students' writing skill by using jigsaw technique. The result showed t-test result 4.690 was higher than t-value 2.042.[66]The effect size result also showed a moderate effect based on Burns' classification($0.2 \leq ES \leq 0.8$). It was also found from three aspects of scoring, grammar, content and organization that has moderate effect on grammar and organization while in content it was highly effective.

From the result of the research that is previously stated. It was proved that students who were taught writing descriptive text by using jigsaw technique got better result. As in this research, the mean score of experimental class is higher than control class (71,31 > 58,71) which means H_a was accepted, so there was significant effect of using jigsaw technique

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[64] Bafadal and Rafika, "The Effectiveness of Jigsaw Technique in Teaching Writing Descriptive Text."

[65]Herlina, "The Effect of Using Jigsaw Technique Toward Students' Ability in Writing Narrative Essay at The Second Year Students of SMP Negeri 1 Bangkinang of Kampar Regency."

[66]Aprianti, Nita, Albert Rufinus, "The Effective Use of Jigsaw in Teaching Descriptive Text Writing."

towards students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu.

After looking the score of using jigsaw technique, this technique is good to be used an innovation for teaching writing. It aims the students to build good teamwork, share the idea, and develop the idea into a good written. Although not all of the aspect in writing can be covered by tis technique, but this technique help students to think, share, and develop the idea together, it was about good teamwork. As the conclusion, this technique is recommended to be used for teaching writing especially in writing descriptive text.

D. Threats of the Research

The researcher found the threats of the research as follow:

1. Some of students were not serious when answering the pre-test. Some of them still were cheating. It made some of the answer same and it was not pure because they did not do it by themselves.

2. The learning implementation is not effective because of the limited time.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

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

1. The score of students' writing ability before using jigsaw technique at grade X MAS Darul Ulum Sipaho Pemadu was low because in pre-test the mean score of experimental class was 48,12.

2. After using jigsaw technique, the mean score of experimental class was higher than the mean score of control class which was taught by conventional strategy. The mean score of post-tes of experimental class was 71,31 and the mean score of control class was 57,81. There were increasing in students' scorein the both of classes if it was compared with the result of pre-test.

3. It is found that t_{count} was higher than t_{table} 5,037 > 1,67252 which means H_a was accepted and H_0 was rejected. Hence, there was significant effect using jigsaw technique towards students' writing ability at grade X MAS Darul Ulum Sipaho Pemadu.

B. Suggestion

After finishing this research, the researcher got much information in English teaching and learning process. Therefore, the writer has suggestion to:

1. Headmaster of MAS Darul Ulum Sipaho Pemadu, to motivate the teacher, especially for English teachers to teach as well as possible by

maximizing the using jigsaw technique or other techniques in teaching English.

2. The researher hopes to the English teacher, especially in MAS Darul Ulum Sipaho Pemadu to use jigsaw technique as an alternative to increase students' writing ability. Jigsaw technique can help students to build high responsibility, good teamwork, sharing together, and solve the problem together.

3. For other researcher, the researcher hopes that the others researcher who want to conduct a research related to this research to find the others influence of this technique deeply. Further research can try to apply this technique with another kind of text, narrative and report text for instance.

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CURRICULUM VITAE

A. Identity

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B. Parents

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C. Educational Background

1. Elementary School : SD Negeri 3 Gunungtua

(2010)

2. Junior High School : SMP Negeri 1 Padang Bolak (2013)

3. Senior High School : SMA Negeri 1 Padang Bolak (2016)

4. Institute : IAIN Padangsidimpuan (2021)

RENCANA PELAKSANAAN PEMBELAJARAN

(RPP)

(EXPERIMENTAL CLASS)

Satuan Pendidikan : MAS Darul Ulum Sipaho Pemadu

Mata Pelajaran : Bahasa Inggris

Kelas/Semester : X/1

Tema/Subtema : Teks deskriptif lisan dan tulis sederhana, tentang tempat wisata

Alokasi Waktu : 60 Menit

A. Kompetensi Inti

1. Memahami, menerapkan, menganalisis pengetahuan faktual, konseptual, prosedural berdasarkan rasa ingin tahunya tentan ilmu pengetahuan, teknologi, seni, budaya, dan humaniora dengan wawasan kemanusiaan, kebangsaan, kenegaraan, dan peradaban terkait penyebab fenomena dan kejadian, serta menerapkan pengetahuan prosedural pada bidang kajian yang spesifik sesuai dengan bakat dan minatnya untuk memecahkan masalah.

2. Mengolah, menalar, dan menyaji dalam ranah konkret dan ranah abstrak terkait dengan pengembangan dari yang dipelajarinya di sekolah secara mandiri, dan mampu menggunakan metoda sesuai kaidah keilmuan.

B. Kompetensi Dasar dan Indikator Pencapaian Kompetensi

Kompetensi Dasar (KD)

1.4 Membedakan fungsi sosial, struktur teks, dan unsur kebahasaan beberapa teks deskriptif lisan dan tulis dengan memberi dan meminta informasi terkait dengan ciri seseorang, tempat wisata, dan bangunan bersejarah terkenal, pendek dan sederhana, sesuai dengan konteks penggunaannya.

2.4 Teks deskriptif

2.4.1 Menangkap makna secara konstektual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks deskriptif, lisan dan tulis, pendek dan sederhana terkait ciri seseorang, tempat wisata dan bangunan bersejarah terkenal

2.4.2 Menyusun teks deskriptif lisan dan tulis, pendek dan sederhana, terkait ciri seseorang, tempat wisata, dan bangunan bersejarah terkenal, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan, secara benar dan sesuai konteks.

C. Tujuan Pembelajaran

1. Peserta didik mampu menunjukkan kesungguhan belajar bahasa inggris terkait teks deskriptive sederhana tentang ciri seseorang, tempat wisata dunia, dan bangunan terkenal.

2. Peserta didik mampu menunjukkan perilaku peduli, percaya diri, dan tanggung jawab dalam melaksanakan komunikasi terkait teks descriptive tentang ciri seseorang, tempat wisata terkenal, atau bangunan terkenal.

3. Peserta didik mampu mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan pada teks deskriptive sederhana ciri seseorang, tempat wisata, atau bangunan terkenal.

4. Peserta didik mampu merespon makna dalam teks deskriptif, sederhana tentang ciri seseorang, tempat wisata, atau bangunan terkenal.

5. Peserta didik mampu menyusun teks deskriptif lisan dan tulis sederhana tentang ciri seseorang, tempat wisata, atau bangunan terkenal.

D. Materi Pembelajaran

Struktur descriptive text (*generic structure*) adalah:

1. Identification (identifikasi) adalah pendahuluan, berupa gambaran umum tentang suatu topik.

2. Description (deskripsi) adalah berisi ciri-ciri khusus yang dimiliki benda, tempat, atau orang yang dideskripsikan.

Ciri-ciri Descriptive Text:

1. Menggunakan simple present tense
2. Menggunakan attribute verb, seperti (am, is, are)
3. Hanya fokus pada satu objek tersebut.

Unsur Kebahasaan

(1) Noun; kata benda yang spesifik, misalnya my best friend, my cat, Borobudur Temple, dan lain-lain.
(2) Simple Present Tense
(3) Adjective; kata sifat digunakan untuk menjelaskan objek
(4) Figurative Language; menggunakan bahasa figuratif seperti simile atau metafora untuk memberikan ilustrasi perbandingan.
(5) Linking verb; kata penghubung berupa to be is, am are, atau yang lain seperti seem, look, dan sebagainya.

E. Alat dan Sumber Pembelajaran

1. Media/Alat: papan tulis, spidol, text book.
2. Sumber: buku guru dan buku siswa kelas X bahasa Inggris, internet.

F. Metode Pembelajaran

3. Metode/media   : *Scientific Approach* (Pendekatan Saintifik)
4. Teknik   : Ceramah, diskusi, tanya jawab, pemberian tugas.

G. Langkah-langkah Kegiatan Pembelajaran

Teacher's Activities	Procedure of Jigsaw Technique	Students' Activities
Pre-Teaching		
1. Teacher comes to the classroom by saying salam or greeting.		1. Students answer salam or greeting together.

2. Teacher asks the students to pray before starting the lesson.		2. Students pray together.
3. The teacher checks the students' attendance list and asking their condition.		3. Students listen and raise their hand depends on their name.
4. Teacher asks the students to prepare their self to study as comfortable as possible.		4. Students prepare their selves to study.
5. The teacher mentions the goal of the study.		5. Students listen to the goal of study.
6. The teacher involves the lesson to the students by using brainstorming activities to know the students' background knowledge.		6. Students respond to the teacher question based on the topic.
While-teaching		
1. The teacher ask the students to take a card one by one.	1. The teacher ask the students to come to the front to take card with number 1-5 and it start again 1-5 until the last students.	1. The students come to front to take the card.
2. The teacher makes the	2. The teacher	2. The students make

students into groups.	divides the students into six group based on their card number 1-5 group 1, start again 1-5 group 2 until the sixth group. One group is consist of five person	their group.
3. The teacher gives a short explanation about rule of jigsaw technique and descriptive text.	3. The first group formed called "home group"	3. The students listen to teacher instruction. 4. The students listen to the teacher's explanation.
4. The teacher say to the students that the first group formed called home group		
5. The teacher asks the students to open their card.	5. Every card have different number, color, and material.	5. The students open their card.
6. The teacher asks the students to make a new group with their friends who have the same card number, color, and material.	6. Move to the new group who has the same card number, color, and material called "expert group"	6. The students do the teacher's instruction. 7. The students do discussion and make a draft consist with their own material. 8. The students share their own material one by one based on own material.
7. The teacher says to the students the new group called expert group.	7. The teacher asks the students to discuss consist with students'	9. The other listen to their friend and write the important

		things about what the information they get.
8. The teacher asks the students to discuss based on their material and make a draft.	8. The teacher asks the students to write a draft consist with students' material.	
9. The teacher asks the students to move back to their home group.	9. The teacher asks the students to remove to their home group.	
10. The teacher asks the students to share what they have discussed.	10. Ask the students to share it with their home group.	
11. The teacher observes the students.	11. In home group the students share and the others listen to their friend and write the information they get.	
12. The teacher and the students discuss it together.	12. The teacher and students discuss together.	
13. The teacher gives addition and appreciate with their work.	13. Finally the students give addition or reviewing.	
Post-teaching		
1. Teacher reviews the		1. Students listen to the

lesson and ask the students to conclude the lesson.		teacher's review and some of them conclude the lesson by guiding the teacher.
2. The teacher gives feedback to students' performance and informs the next topic.		2. Students listen to the teacher's feedback.
3. The teacher asks the students to convey their feeling while learning process.		3. The students express their feeling about the learning process.
4. Then the teacher asks the students to pray after learning and then the teacher closes the learning by saying salam or greeting.		4. The students pray after learning and answer the teacher's salam or greeting.

H. Penilaian

Teknik   : Tes tertulis

Bentuk   : Menyusun teks deskriptif

Instrument   : Tourism Places in North Sumatera

Pedoman Penilaian

Rubric Penilaian:

Aspect	Score	Performance Description	Weighting
Content (C) - Topic - Details	4	Excellent to very good	10x
	3	Good to average	
	2	Fair to poor limited	
	1	Very poor	
Organization (O) - Identification - Description	4	Excellent to very good	10x
	3	Good to average	
	2	Fair to poor limited	
	1	Very poor	
Grammar (G) - Use Present Tense - Agreement	4	Excellent to very good	10x
	3	Good to average	
	2	Fair to poor limited	
	1	Very poor	
Vocabulary (V) - New Word	4	Excellent to very good	10x
	3	Good to average	
	2	Fair to poor limited	
	1	Very poor	
Mechanics (M) - Spelling - Capitalization - Punctuation	4	Excellent to very good	10x
	3	Good to average	
	2	Fair to poor limited	
	1	Very poor	

Score: $\dfrac{C+O+G+V+M}{2} =$

Sipaho,   2020

Mengetahui

Guru Mata Pelajaran   Peneliti

Jumrinah Siregar, S.Pd.   Imanda Putri Harahap
                                                               Reg. No. 16 203 00029

RENCANA PELAKSANAAN PEMBELAJARAN

(RPP)

(CONTROL CLASS)

Satuan Pendidikan　:　MAS Darul Ulum Sipaho Pemadu

Mata Pelajaran　　:　Bahasa Inggris

Kelas/Semester　　:　X/1

Tema/Subtema　　: Teks deskriptif lisan dan tulis sederhana, tentang tempat wisata

Alokasi Waktu　　: 60 Menit

A. Kompetensi Inti

1. Memahami, menerapkan, menganalisis pengetahuan faktual, konseptual, prosedural berdasarkan rasa ingin tahunya tentan ilmu pengetahuan, teknologi, seni, budaya, dan humaniora dengan wawasan kemanusiaan, kebangsaan, kenegaraan, dan peradaban terkait penyebab fenomena dan kejadian, serta menerapkan pengetahuan prosedural pada bidang kajian yang spesifik sesuai dengan bakat dan minatnya untuk memecahkan masalah.

2. Mengolah, menalar, dan menyaji dalam ranah konkret dan ranah abstrak terkait dengan pengembangan dari yang dipelajarinya di sekolah secara mandiri, dan mampu menggunakan metoda sesuai kaidah keilmuan.

B. Kompetensi Dasar dan Indikator Pencapaian Kompetensi

Kompetensi Dasar (KD)

1.4　　Membedakan fungsi sosial, struktur teks, dan unsur kebahasaan beberapa teks deskriptif lisan dan tulis dengan memberi dan meminta informasi terkait dengan ciri seseorang, tempat wisata, dan bangunan bersejarah terkenal, pendek dan sederhana, sesuai dengan konteks penggunaannya.

2.4   Teks deskriptif

2.4.1 Menangkap makna secara konstektual terkait fungsi sosial, struktur teks, dan unsur kebahasaan teks deskriptif, lisan dan tulis, pendek dan sederhana terkait ciri seseorang, tempat wisata dan bangunan bersejarah terkenal

2.4.2 Menyusun teks deskriptif lisan dan tulis, pendek dan sederhana, terkait ciri seseorang, tempat wisata, dan bangunan bersejarah terkenal, dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan, secara benar dan sesuai konteks.

C. Tujuan Pembelajaran

1. Peserta didik mampu menunjukkan kesungguhan belajar bahasa inggris terkait teks deskriptive sederhana tentang ciri seseorang, tempat wisata dunia, dan bangunan terkenal.

2. Peserta didik mampu menunjukkan perilaku peduli, percaya diri, dan tanggung jawab dalam melaksanakan komunikasi terkait teks descriptive tentang ciri seseorang, tempat wisata terkenal, atau bangunan terkenal.

3. Peserta didik mampu mengidentifikasi fungsi sosial, struktur teks dan unsur kebahasaan pada teks deskriptive sederhana ciri seseorang, tempat wisata, atau bangunan terkenal.

4. Peserta didik mampu merespon makna dalam teks deskriptif, sederhana tentang ciri seseorang, tempat wisata, atau bangunan terkenal.

5. Peserta didik mampu menyusun teks deskriptif lisan dan tulis sederhana tentang ciri seseorang, tempat wisata, atau bangunan terkenal.

D. Materi Pembelajaran

Struktur descriptive text (*generic structur*) adalah:

1. Identification (identifikasi) adalah pendahuluan, berupa gambaran umum tentang suatu topik.

2. Description (deskripsi) adalah berisi ciri-ciri khusus yang dimiliki benda, tempat, atau orang yang dideskripsikan.

Ciri-ciri Descriptive Text:
1. Menggunakan simple present tense
2. Menggunakan attribute verb, seperti (am, is, are)
3. Hanya fokus pada satu objek tersebut.

Unsur Kebahasaan

(1) Noun; kata benda yang spesifik, misalnya my best friend, my cat, Borobudur Temple, dan lain-lain.
(2) Simple Present Tense
(3) Adjective; kata sifat digunakan untuk menjelaskan objek
(4) Figurative Language; menggunakan bahasa figuratif seperti simile atau metafora untuk memberikan ilustrasi perbandingan.
(5) Linking verb; kata penghubung berupa to be is, am are, atau yang lain seperti seem, look, dan sebagainya.

E. Alat dan Sumber Pembelajaran
1. Media/Alat: papan tulis, spidol, text book.
2. Sumber: buku guru dan buku siswa kelas X bahasa Inggris, internet.

F. Metode Pembelajaran
3. Metode/media   : *Scientific Approach* (Pendekatan Saintifik)
4. Teknik   : Ceramah, diskusi, tanya jawab, pemberian tugas.

G. Langkah-langkah Kegiatan Pembelajaran

Kegiatan	Deskripsi Kegiatan	Alokasi Waktu
Pendahuluan	1. Guru memulai kegiatan dengan salam 2. Guru meminta salah satu siswa untuk memimpin doa sebelum pelajaran dimulai	**10 menit**

	3. Guru menanyakan kabar siswa sekaligus mengabsen siswa 4. Menyebutkan tujuan pembelajaran dan kegiatan yang akan dilakukan	
Kegiatan Inti	**(Observing) Mengamati** 1. Guru menjelaskan pengertian, fungsi sosial dari descriptive teks. 2. Guru menjelaskan *generic structure* dari *descriptive text* 3. Guru menjelaskan unsur kebahasaan (*language feature*) yang digunakan pada *descriptive text* 4. Guru menyuruh siswa untuk memperhatikan contoh teks deskripsi "Niagara Falls" yang terdapat dalam buku paket sekolah. 5. Siswa memperhatikan fungsi sosial, struktur teks, maupun unsur kebahasaan dari deskriptif teks 6. Guru bersama siswa menganalisis fungsi social, unsur kebahasaan, dan generic structure yang ada di dalam descriptive text. **(Questioning) Menanya** 1. Guru membimbing siswa untuk	**40 menit**

	menanyakan informasi yang terdapat dalam teks deskriptif tersebut terkait dengan fungsi social, generic structure dan language features. 2. Siswa merespon pertanyaan yang berkaitan dengan teks secara lisan. **(Collecting Data) Mengeksplorasi** 1. Guru menyuruh siswa untuk berdiskusi dengan teman sebangku. **(Associating) Mengasosiasi** 1. Guru membagikan materi tentang tempat tempat wisata di Sumatera Utara; Aek Sijornih dan Pantai Pandan. 2. Siswa bersama teman sebangkunya menyusun teks deskriptif dengan tema "Destination in North Sumatera" (Pandan Beach, Aek Sijornih). 3. Guru mengamati dan merespon siswa selama proses pembelajaran/diskusi berlangsung. **(Communicating) Mengkomunikasi** 1. Siswa dengan teman sebangkunya mempresentasikan materi	

	dengan kelompok lain yang memiliki tema yang berbeda dengan mereka. 2. Guru mengamati dan menilai presentasi siswa dari aspek keterampilan.		
Penutup	1. Siswa dengan bimbingan guru menyimpulkan pembelajaran hari itu. 2. Guru memberikan feedback (umpan balik) kepada siswa tentang pembelajaran. 3. Guru menyampaikan rencana pembelajaran untuk pertemuan berikutnya. 4. Guru meminta salah satu siswa untuk memimpin doa setelah pembelajaran. 5. Guru menutup pembelajaran dengan salam.	**10 enit**

H. Penilaian

Teknik   : Tes tertulis

Bentuk   : Menyusun teks deskriptif

Instrument   : Tourism Places in North Sumatera

Pedoman Penilaian

Rubric Penilaian:

Aspect	Score	Performance Description	Weighting
Content (C)	4	Excellent to very good	10x
- Topic	3	Good to average	

- Details	2	Fair to poor limited	
	1	Very poor	
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	3	Good to average	
	2	Fair to poor limited	
	1	Very poor	
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	3	Good to average	
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	1	Very poor	
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	2	Fair to poor limited	
	1	Very poor	
Mechanics (M) - Spelling - Capitalization - Punctuation	4	Excellent to very good	10x
	3	Good to average	
	2	Fair to poor limited	
	1	Very poor	

Score: $\frac{C+O+G+V+M}{2} =$

Sipaho,   2020

Mengetahui

Guru Mata Pelajaran   Peneliti

Jumrinah Siregar, S.Pd.   Imanda Putri Harahap
                                                     Reg. No. 16 203 00029

APPENDIX 3

<div align="center">

THE INSTRUMENT

(PRE-TEST)

</div>

Class   **: X**

Subject   **: English**

Text   **: Descriptive Text**

Time Allotment   **: 60 minutes**

Theme   **: Destination Traveling**

Instruction :

1. Write your name and class on the top corner of your answer sheet.

2. Write descriptive text about tourism place that you have visited at least 2 paragraph in ±100 words.

Validator

Yusni Sinaga, M.Hum.

NIP. 19700715 200501 2 010

STUDENTS WORKSHEET

(PRE-TEST)

Name   : _____

Class   : _____

_____

_____

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APPENDIX 4

THE INSTRUMENT

(POST-TEST)

Class : **X**

Subject : **English**

Text : **Descriptive Text**

Time Allotment : **60 minutes**

Theme : **Tourism Place in North Sumatera**

Instruction :

1. Write your name and class on the top corner of your answer sheet.

2. Look at the picture below!

Lake Tao

Bahal Temple

3. Choose one of the picture and describe the picture depend on social function, generic stucture and language feature of descriptive text at least 2 paragraph in ±100 words.

Validator

Yusni Sinaga, M.Hum.

NIP. 19700715 200501 2 010

STUDENTS WORKSHEET

(POST-TEST)

Name   **:**

Class   **:**

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APPENDIX 5

SCORE OF EXPERIMENTAL CLASS AND CONTROL CLASS

PRE-TEST

A. Pre- Test score of Experimental Class (X-IPA)

No.	The Initial Name of Students (n)	Pre- Test
1.	LAH	65
2.	DHH	45
3.	JAS	65
4.	TMH	40
5.	DN	55
6.	IST	70
7.	AH	55
8.	APH	60
9.	MYN	35
10.	LS	60
11.	RH	55
12.	AGS	60
13.	NYH	50
14.	SSRH	55
15.	ISH	55
16.	IM	50
17.	FS	35
18.	RS	50
19.	AFS	60
20.	MSS	45
21.	FAS	50
22.	AR	50
23.	DAN	45
24.	SS	35
25.	SHH	50
26.	NHS	50
27.	SNN	40
28.	SP	50
29.	RAP	45
30.	HH	45
Total Score		1.525

B. Pre- Test score of Control Class (X-IPS[1])

No.	The Initial Name of Students (n)	Pre- Test
1.	M	70
2.	TW	65
3.	DI	55
4.	MAP	70
5.	NFH	35
6.	SRH	50
7.	AAH	45
8.	SRS	65
9.	MKN	55
10.	NGH	35
11.	NZKS	75
12.	WAS	65
13.	S	55
14.	YAS	65
15.	KNS	40
16.	TSD	60
17.	MSH	55
18.	RHH	50
19.	WR	35
20.	SAS	50
21.	ISN	55
22.	FHH	55
23.	IAS	60
24.	MS	60
25.	FYS	45
26.	AH	45
27.	RSH	60
28.	RFD	35
Total Score		1.510

APPENDIX 6

RESULT OF NORMALITY TEST IN PRE-TEST

A. Result of the Normality Test of X-IPA in Pre-Test

1. The score of X-IPA in pre-test from low score to high score

35	35	35	40	40	45	45	45	45	45
50	50	50	50	50	50	50	50	55	55
55	55	55	60	60	60	60	65	65	70

2. High $= 70$

   Low $= 35$

   Range $=$ High – Low

   $= 70 - 35$

   $= 35$

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

   $= 1 + 3,3 \log (30)$

   $= 1 + 3,3 (1,47)$

   $= 1 + 4,85$

   $= 5,85$

   $= 6$

4. Lenght of classes $= \dfrac{range}{total\ of\ class} = \dfrac{35}{6} = 5,83 = 6$

5. Mean

Interval	F	X	X	Fx	x^2	Fx^2
35-40	5	+2	37,5	10	4	20
41-46	5	+1	43,5	5	1	5
47-52	**8**	**0**	**49,5**	**0**	**0**	**0**
53-58	5	-1	55,5	-5	1	5
59-64	4	-2	61,5	-8	4	16
65-70	3	-3	67,5	-9	9	27
i= 6	30	-	-	-7	-	73

$$M_x = M^1 + i\frac{\sum fx^1}{N}$$

$$= 49{,}5 + 6\left(\frac{-7}{30}\right)$$

$$= 49{,}5 + 6\,(-0{,}23)$$

$$= 49{,}5 - 1{,}38$$

$$= 48{,}12$$

$$SD_t = i\sqrt{\frac{\sum fx'^2 -}{n}\left(\frac{\sum fx'^1}{n}\right)^2}$$

$$= 6\sqrt{\frac{73}{30} - \left(\frac{-7}{30}\right)^2}$$

$$= 6\sqrt{2{,}43 - (-0{,}23)^2}$$

$$= 6\sqrt{2{,}43 - 0{,}05}$$

$$= 6\sqrt{2{,}38}$$

$$= 6 \times 1{,}54$$

$$= 9{,}24$$

Table of Normality Data Test with Chi-Quadrat formula

Interval of Score	Real Upper Limit	Z-Score	Limit of Large of the Area	Large of Area	f_o	f_h	$\frac{(fo - fh)}{f}$
65 – 70	70,5	2,42	0,4922				
				0,12	3	3,6	-0,166
59 – 64	64,5	1,77	0,4616				
				0,09	4	2,7	0,481
53 – 58	58,5	1,12	0,3686				
				0,18	5	5,4	-0,074
47 – 52	52,5	0,47	0,1808				
				0,11	8	3,3	1,424
41 – 46	46,5	-0,17	0,0675				
				0,22	5	6,6	-0,242
35 – 40	40,5	-0,82	0,2939				

				0,13	5	3,9	0,282
	34,5	-1,47	0,4292				
						X^2	1,705

Based on the table above, the researcher found that $x^2_{count} = 1,705$ while $x^2_{table} = 7,815$ cause $x^2_{count} < x^2_{table}$ (1,705 < 7,815) with degree of freedom (dk) = 6-3 = 3 and significant level α= 5% so distribution of X-IPA class (pre-test) is normal.

6. Median

No.	Interval	F	Fk
1.	35 – 40	5	5
2.	41 – 46	5	10
3.	47 – 52	8	18
4.	53 – 58	5	23
5.	59 – 64	4	27
6.	65 – 70	3	30

Position of Me in interval of classes is number 3 that,
b = 47- 0,5= 46,5
p = 6
n = 30
F = 10
f = 8

So,

Me $= b + p[\frac{1/2\,n - F}{f}]$

Me $= 46,5 + 6[\frac{1/2(30) - 10}{8}]$

Me $= 46,5 + 6[\frac{15 - 10}{8}]$

Me $= 46,5 + 6[\frac{5}{8}]$

Me $= 46,5 + 6(0,625)$

Me $= 46,5 + 3,75$

Me $= 50,25$

7. Modus

No.	Interval	F	Fk
1.	35 – 40	5	5
2.	41 – 46	5	10
3.	**47 – 52**	**8**	**18**
4.	53 – 58	5	23
5.	59 – 64	4	27
6.	65 – 70	3	30

Mo $= L + \dfrac{d_1}{d_1+d_2} i$

L $= 46,5$

d_1 $= 3$

d_2 $= 3$

i $= 6$

So,

Mo $= L + \dfrac{d_1}{d_1+d_2} i$

Mo $= 46,5 + \dfrac{3}{3+3} 6$

Mo $= 46,5 + \dfrac{3}{6} 6$

Mo $= 46,5 + (0,5)6$

Mo $= 46,5 + 3$

Mo $= 49,5$

B. Result of the Normality Test of X-IPS[1] in Pre-Test

1. The score of X-IPA in pre-test from low score to high score

35	35	35	35	40	45	45	45	50	50
50	55	55	55	55	55	55	60	60	60
60	65	65	65	65	70	70	75		

2. High $= 75$

   Low $= 35$

   Range $=$ High $-$ Low

   $= 75 - 35$

   $= 40$

3. Total of classes $= 1 + 3{,}3 \log (n)$

   $= 1 + 3{,}3 \log (28)$

   $= 1 + 3{,}3 (1{,}44)$

   $= 1 + 4{,}752$

   $= 5{,}752$

   $= 6$

4. Lenght of classes $= \dfrac{range}{total\ of\ class} = \dfrac{40}{6} = 6{,}66 = 7$

5. Mean

Interval	F	X	X	Fx	x^2	Fx^2
35-41	5	+2	38	10	4	20
42-48	3	+1	45	5	1	5
49-55	**9**	**0**	**52**	**0**	**0**	**0**
56-62	4	-1	59	-5	1	5
63-69	4	-2	66	-8	4	16
70-76	3	-3	73	-9	9	27
$i= 7$	28	-	-	-8	-	70

$$M_x = M^1 + i\frac{\sum fx^1}{N}$$

$$= 52 + 7\left(\frac{-8}{28}\right)$$

$$= 52 + 7\ (-0{,}28)$$

$$= 52 - 1{,}96$$

$$= 50{,}04$$

$$SD_t = i\sqrt{\frac{\sum fx'^2 -}{n}\left(\frac{\sum fx'^1}{n}\right)^2}$$

$$= 7\sqrt{\frac{70}{28} - \left(\frac{-8}{28}\right)^2}$$

$$= 7\sqrt{2{,}5 - (-0{,}28)^2}$$

$$= 7\sqrt{2{,}5 - 0{,}07}$$

$$= 7\ \sqrt{2{,}43}$$

$$= 7\ x\ 1{,}55$$

$$= 10{,}85$$

Table of Normality Data Test with Chi-Quadrat formula

Interval of Score	Real Upper Limit	Z-Score	Limit of Large of the Area	Large of Area	f_o	f_h	$\frac{(fo - fh)}{f}$
70 – 76	76,5	2,43	0,4025				
				0,06	3	1,68	0,785
63 – 69	69,5	1,79	0,4633				
				0,09	4	2,52	0,587
56 – 62	62,5	1,14	0,3729				
				0,18	4	5,04	-0,206
49 – 55	55,5	0,50	0.1808				
				0,13	9	3,64	1,472
42 – 48	48,5	-0,14	0,0557				
				0,22	3	6,16	-0,512
35 – 41	41,5	-0,78	0,2823				

			0,14	5	3,92	0,275
34,5	-1,43	0,4236				
					X^2	2,401

Based on the table above, the researcher found that x^2_{count} = 2,401 while x^2_{table} = 9,488 cause x^2_{count} < x^2_{table} (2,401 < 9,488) with degree of freedom (dk) = 7-3 = 4 and significant level α= 5% so distribution of X-IPS[1] class (pre-test) is normal.

6. Median

No.	Interval	F	Fk
1.	35 – 41	5	5
2.	42 – 48	3	8
3.	49 – 55	9	17
4.	56 – 62	4	21
5.	63 – 69	4	25
6.	70 - 76	3	28

Position of Me in interval of classes is number 3 that,
b = 49- 0,5= 48,5
p = 7
n = 28
F = 8
f = 9

So,

Me $= b + p[\frac{1/2\, n - F}{f}]$

Me $= 48,5 + 7[\frac{1/2(28) - 8}{9}]$

Me $= 48,5 + 7[\frac{14 - 8}{9}]$

Me $= 48,5 + 7[\frac{6}{9}]$

Me $= 48,5 + 7(0,66)$

Me $= 48,5 + 4,62$

Me $= 53,12$

7. Modus

No.	Interval	F	Fk
1.	35 – 41	5	5
2.	42 – 48	3	8
3.	**49 – 55**	**9**	**17**
4.	56 – 62	4	21
5.	63 – 69	4	25
6.	70 - 76	3	28

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

L $= 48,5$

d_1 $= 6$

d_2 $= 5$

i $= 7$

So,

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

Mo $= 48,5 + \frac{6}{6+5} 7$

Mo $= 48,5 + \frac{6}{11} 7$

Mo $= 48,5 + (0,54)7$

Mo $= 48,5 + 3,78$

Mo $= 52,28$

APPENDIX 7

HOMOGEINITY TEST (PRE-TEST)

Calculation of parameter to get variant of the first class as experiment class sample by using jigsaw technique and variant of the second class as control sample by using convetional technique are used homogeinity test, which the formula:

$$S^2 = \frac{n \sum x_1^2 - (\sum x_i)^2}{n(n-1)}$$

Hypotheses:

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

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

A. Variant of the X-IPA class is:

No.	Xi	Xi^2
1.	65	4225
2.	45	2025
3.	65	4225
4.	40	1600
5.	55	3025
6.	70	4900
7.	55	3025
8.	60	3600
9.	35	1225
10.	60	3600
11.	55	3025
12.	60	3600
13.	50	2500
14.	55	3025
15.	55	3025
16.	50	2500
17.	35	1225
18.	50	2500

No.	Xi	Xi²
19.	60	3600
20.	45	2025
21.	50	2500
22.	50	2500
23.	45	2025
24.	35	1225
25.	50	2500
26.	50	2500
27.	40	1600
28.	50	2500
29.	45	2025
30.	45	2025
$\sum$	1.525	79.875

n= 30

$\sum x_i = 1.525$

$\sum x_i{}^2 = 79.875$

So,

$$S^2 = \frac{n \sum x_1{}^2 - (\sum x_i)^2}{n \, (n-1)}$$

$$= \frac{30 \, (79.875) - (1.525)^2}{30 \, (30-1)}$$

$$= \frac{2.396.250 - 2.325.625}{870}$$

$$= \frac{70.625}{870}$$

$$S^2 = 81,178$$

B. Variant of the X-IPS[1] class is:

No.	Xi	Xi²
1.	70	4900
2.	65	4225
3.	55	3025
4.	70	4900
5.	35	1225
6.	50	2500

7.	45	2025
8.	65	4225
9.	55	3025
10.	35	1225
11.	75	5625
12.	65	4225
13.	55	3025
14.	65	4225
15.	40	1600
16.	60	3600
17.	55	3025
18.	50	2500
19.	35	1225
20.	50	2500
21.	55	3025
22.	55	3025
23.	60	3600
24.	60	3600
25.	45	2025
26.	45	2025
27.	60	3600
28.	35	1225
$\sum$	1.510	84.950

n= 28

$\sum x_i = 1.510$

$\sum x_i{}^2 = 84.950$

So,

$$S^2 = \frac{n \sum x_1{}^2 - (\sum x_i)^2}{n\,(n-1)}$$

$$= \frac{28\,(84.950) - (1.510)^2}{28\,(28-1)}$$

$$= \frac{2.378.600 - 2.280.100}{756}$$

$$= \frac{98.500}{756}$$

$$S^2 = 130,291$$

The formula was used to test hypothesis was:

X- IPA and X-IPS[1]:

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

$$F = \frac{130,291}{81,178}$$

$$= 1,6050$$

Because in t distribution does not get the value for $(1-\frac{1}{2}\alpha)$ and dk=(n_1+n_2-2)= (30+28-2) = 56, for α=0,05 so the table is searched by interpolation.

$$I = \frac{r-t_{value}}{r-df} \quad \text{where } I= \text{interpolation value}$$

$r - t_{value}$= range (the difference between the t values in the table from two closest dk)

The position of dk 56 is between dk 40 dan dk 60, t value for dk 40= 1,684 while t value for dk 60= 1,671, so range of t value = 1,684 – 1,671= 0,013

r- df = range from two closest value = 60-40=20 so,

$$I = \frac{r-t_{value}}{r-df} \text{ x (df – lowest df)}$$

$$I = \frac{0,013}{20} - (56 - 40)$$

$$I = 0,00065 \text{ x } 16$$

$$= 0,0104$$

t value for dk=56= t value for dk= 40- I = 1,684 – 0,0104

$$= 1,6736$$

After do the calculation the researcher found that F_{count}= 1,6050 with α=5% and dk=56 after do the interpolation the calculation for dk 56= 1,6736, cause $F_{count} < F_{table}$ (1,6050< 1,6736). So there is no difference the variant between the X-IPA class and X-IPS[1] class. It means that the variant is homogenous.

APPENDIX 8

SCORE OF EXPERIMENTAL CLASS AND CONTROL CLASS
POST-TEST

A. Post- Test score of Experimental Class (X-IPA)

No.	The Initial Name of Students (n)	Post- Test
1.	NAP	60
2.	SPS	65
3.	HHS	70
4.	SF	45
5.	AH	45
6.	RH	50
7.	SHH	50
8.	ISH	65
9.	SS	70
10.	SSRH	80
11.	LS	70
12.	MSS	50
13.	DHH	65
14.	IMM	55
15.	RSS	80
16.	FAS	70
17.	ARS	60
18.	FS	70
19.	TMH	65
20.	NHS	70
21.	IST	85
22.	DN	70
23.	LHS	70
24.	JAS	60
25.	DAN	85
26.	MYN	80
27.	AGS	75
28.	SNN	75
29.	NY	75
30.	APH	75
Total Score		2.005

B. Post- Test score of Control Class (X-IPS[1])

No.	The Initial Name of Students (n)	Post- Test
1.	RS	60
2.	MS	65
3.	NZK	65
4.	AAH	60
5.	FHH	60
6.	SRD	65
7.	DI	50
8.	ISN	65
9.	M	75
10.	MAP	60
11.	YAS	70
12.	NGH	60
13.	WAS	65
14.	TSD	60
15.	RFD	50
16.	FYS	75
17.	WR	70
18.	KHS	60
19.	SRS	70
20.	TW	75
21.	AAH	75
22.	PN	50
23.	MKN	45
24.	IA	55
25.	RHH	45
26.	MSH	40
27.	AH	35
28.	NFH	60
	Total Score	1.705

APPENDIX 9

RESULT OF NORMALITY TEST IN POST-TEST

A. Result of the Normality Test of X-IPA in Post-Test

1. The score of X-IPA in post-test from low score to high score

45	45	50	50	50	55	60	60	60	65
65	65	65	70	70	70	70	70	70	70
70	75	75	75	75	80	80	80	85	85

2. High $= 85$

   Low $= 45$

   Range $=$ High $-$ Low

   $= 85 - 45$

   $= 40$

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

   $= 1 + 3,3 \log (30)$

   $= 1 + 3,3 \ (1,47)$

   $= 1 + 4,85$

   $= 5,85$

   $= 6$

4. Lenght of classes $= \frac{range}{total \ of \ class} = \frac{40}{6} = 6,66 = 7$

5. Mean

Interval	F	X	X	Fx	x^2	Fx^2
45-51	5	+3	48	15	9	45
52-58	1	+2	55	2	4	4
59-65	7	+1	62	7	1	7
66-72	**8**	**0**	**69**	**0**	**0**	**0**
73-79	4	-1	76	-4	1	4
80-86	5	-2	83	-10	4	20
i= 7	30	-	-	10	-	80

$$M_x = M^1 + i\frac{\sum fx^1}{N}$$

$$= 69 + 7\left(\frac{10}{30}\right)$$

$$= 69 + 7\ (0,33)$$

$$= 69 + 2,31$$

$$= 71,31$$

$$SD_t = i\sqrt{\frac{\sum fx'^2-}{n}\ \left(\frac{\sum fx'^1}{n}\right)^2}$$

$$= 7\sqrt{\frac{80}{30} - \left(\frac{10}{30}\right)^2}$$

$$= 7\ \sqrt{2,66 - (0,33)^2}$$

$$= 7\sqrt{2,66 - 0,10}$$

$$= 7\ \sqrt{2,56}$$

$$= 7\ x\ 1,6$$

$$= 11,2$$

Table of Normality Data Test with Chi-Quadrat formula

Interval of Score	Real Upper Limit	Z-Score	Limit of Large of the Area	Large of Area	f_o	f_h	$\dfrac{(fo-fh)}{f}$
80 – 86	86,5	1,35	0,4115				
				0,14	5	4,2	0,190
73 – 79	79,5	0,73	0,2673				
				0,22	4	6,6	-0,393
66 – 72	72,5	0,10	0,0398				
				0,15	8	4,5	0,777
59 – 65	65,5	-0,51	0,1950				
				0,17	7	5,1	0,372
52 – 58	58,5	-1,14	0,3729				
				0,08	1	2,4	-0,583
45 – 51	51,5	-1,76	0,4608				

				0,03	5	0,9	4,555
	44,5	-2,39	0,4916				
						X^2	4,141

Based on the table above, the researcher found that $x^2_{count} = 4,141$ while $x^2_{table} = 9,488$ cause $x^2_{count} < x^2_{table}$ (4,141 < 9,488) with degree of freedom (dk) = 7-3 = 4 and significant level α= 5% so distribution of X-IPA class (post-test) is normal.

6. Median

No.	Interval	F	Fk
1.	45 – 51	5	5
2.	52 – 58	1	6
3.	59 – 65	7	13
4.	66 – 72	8	21
5.	73 – 79	4	25
6.	80 – 86	5	30

Position of Me in interval of classes is number 4 that,
b = 66- 0,5= 65,5
p = 7
n = 30
F = 13
f = 8

So,

Me $= b + p[\dfrac{^1/_2\,n - F}{f}]$

Me $= 65,5 + 7[\dfrac{^1/_{2(30)} - 13}{8}]$

Me $= 65,5 + 7[\dfrac{15-13}{8}]$

Me $= 65,5 + 7[\dfrac{2}{8}]$

Me $= 65,5 + 7(0,25)$

Me $= 65,5 + 1,75$

Me $= 67,25$

7. Modus

No.	Interval	F	Fk
1.	45 – 51	5	5
2.	52 – 58	1	6
3.	59 – 65	7	13
4.	**66 – 72**	**8**	**21**
5.	73 – 79	4	25
6.	80 – 86	5	30

$\text{Mo} = L + \frac{d_1}{d_1 + d_2} i$

$L = 65,5$

$d_1 = 1$

$d_2 = 4$

$i = 7$

So,

$\text{Mo} = L + \frac{d_1}{d_1 + d_2} i$

$\text{Mo} = 65,5 + \frac{1}{1+4} 7$

$\text{Mo} = 65,5 + \frac{1}{5} 7$

$\text{Mo} = 65,5 + (0,2)7$

$\text{Mo} = 65,5 + 1,4$

$\text{Mo} = 66,9$

B. Result of the Normality Test of X-IPS[1] in Post-Test

1. The score of X-IPS[1] in post-test from low score to high score

35	40	45	45	50	50	50	55	60	60
60	60	60	60	60	60	65	65	65	65
65	70	70	70	75	75	75	75		

2. High $= 75$

   Low $= 35$

   Range $=$ High $-$ Low

   $= 75 - 35$

   $= 40$

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

   $= 1 + 3,3 \log (28)$

   $= 1 + 3,3 (1,44)$

   $= 1 + 4,752$

   $= 5,752$

   $= 6$

4. Lenght of classes $= \dfrac{range}{total\ of\ class} = \dfrac{40}{6} = 6,66 = 7$

5. Mean

Interval	F	X	X	Fx	x^2	Fx^2
35-41	2	+3	38	6	9	18
42-48	2	+2	45	4	4	8
49-55	4	+1	52	4	1	4
56-62	**8**	**0**	**59**	**0**	**0**	**0**
63-69	5	-1	66	-5	1	5
70-76	7	-2	73	-14	4	28
i= 7	28	-	-	-5	-	63

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

$$= 59 + 7 \left(\frac{-5}{28}\right)$$

$$= 52 + 7 \, (-0{,}17)$$

$$= 52 - 1{,}19$$

$$= 57{,}81$$

$$SD_t = i\sqrt{\frac{\Sigma fx'^2 -}{n} \left(\frac{\Sigma fx'^1}{n}\right)^2}$$

$$= 7\sqrt{\frac{63}{28} - \left(\frac{-5}{28}\right)^2}$$

$$= 7\sqrt{2{,}25 - (-0{,}17)^2}$$

$$= 7\sqrt{2{,}25 - 0{,}02}$$

$$= 7\,\sqrt{2{,}23}$$

$$= 7 \times 1{,}49$$

$$= 10{,}43$$

Table of Normality Data Test with Chi-Quadrat formula

Interval of Score	Real Upper Limit	Z-Score	Limit of Large of the Area	Large of Area	f_o	f_h	$\frac{(fo - fh)}{f}$
70 – 76	76,5	1,79	0,4633				
				0,06	7	2,52	1,777
63 – 69	69,5	1,12	0,3686				
				0,09	5	5,32	-0,060
56 – 62	62,5	0,44	0,1700				
				0,18	8	3,92	1,040
49 – 55	55,5	-0,22	0,0871				
				0,13	4	6,16	-0,350
42 – 48	48,5	-0,89	0,3133				
				0,22	2	3,36	-0,404

35 – 41	41,5	-1,56	0,4406				
				0,14	2	1,12	0,785
	34,5	-2,23	0,4871				
						X^2	2,788

Based on the table above, the researcher found that x^2_{count} = 2,788 while x^2_{table} = 9,488 cause $x^2_{count} < x^2_{table}$ (2,788 < 9,488) with degree of freedom (dk) = 7-3 = 4 and significant level α= 5% so distribution of X-IPS[1] class (post-test) is normal.

6. Median

No.	Interval	F	Fk
1.	35 – 41	2	2
2.	42 – 48	2	4
3.	49 – 55	4	8
4.	56 – 62	8	16
5.	63 – 69	5	21
6.	70 - 76	7	28

Position of Me in interval of classes is number 4 that,
b = 56- 0,5= 55,5
p = 7
n = 28
F = 8
f = 8

So,

$Me = b + p[\frac{1/2\,n - F}{f}]$

$Me = 55,5 + 7[\frac{1/2(28) - 8}{8}]$

$Me = 55,5 + 7[\frac{14-8}{8}]$

$Me = 55,5 + 7[\frac{6}{8}]$

$Me = 55,5 + 7(0,75)$

$Me = 55,5 + 5,25$

$Me = 60,75$

7. Modus

No.	Interval	F	Fk
1.	35 – 41	2	2
2.	42 – 48	2	4
3.	49 – 55	4	8
4.	**56 – 62**	**8**	**16**
5.	63 – 69	5	21
6.	70 - 76	7	28

Mo $\quad = L + \frac{d_1}{d_1+d_2} i$

L $\quad = 55,5$

$d_1 \quad = 4$

$d_2 \quad = 3$

$i \quad = 7$

So,

Mo $\quad = L + \frac{d_1}{d_1+d_2} i$

Mo $\quad = 55,5 + \frac{4}{4+3} 7$

Mo $\quad = 55,5 + \frac{4}{7} 7$

Mo $\quad = 55,5 + (0,57)7$

Mo $\quad = 55,5 + 3,99$

Mo $\quad = 59,49$

APPENDIX 10

HOMOGEINITY TEST (POST-TEST)

Calculation of parameter to get variant of the first class as experiment class sample by using jigsaw technique and variant of the second class as control sample by using convetional technique are used homogeinity test, which the formula:

$$S^2 = \frac{n \sum x_1{}^2 - (\sum x_i)^2}{n(n-1)}$$

Hypotheses:

$\mathrm{H_o}$: $\delta_1{}^2 = \delta_2{}^2$

$\mathrm{H_1}$: $\delta_1{}^2 \neq \delta_2{}^2$

A. Variant of the X-IPA class is:

No.	Xi	Xi^2
1.	60	3600
2.	65	4225
3.	70	4900
4.	45	2025
5.	45	2025
6.	50	2500
7.	50	2500
8.	65	4225
9.	70	4900
10.	80	6400
11.	70	4900
12.	50	2500
13.	65	4225
14.	55	3025
15.	80	6400
16.	70	4900
17.	60	3600
18.	70	4900

No.	Xi	Xi²
19.	65	4225
20.	70	4900
21.	85	7225
22.	70	4900
23.	70	4900
24.	60	3600
25.	85	7225
26.	80	6400
27.	75	5625
28.	75	5625
29.	75	5625
30.	75	5625
$\sum$	2.005	137.625

n= 30

$\sum x_i = 2.005$

$\sum x_i{}^2 = 137.625$

So,

$$S^2 = \frac{n \sum x_1{}^2 - (\sum x_i)^2}{n\,(n-1)}$$

$$= \frac{30\,(137.625) - (2.005)^2}{30\,(30-1)}$$

$$= \frac{4.128.750 - 4.020.025}{870}$$

$$= \frac{108.725}{870}$$

$S^2 = 124{,}971$

B. Variant of the X-IPS[1] class is:

No.	Xi	Xi²
1.	60	3600
2.	65	4225
3.	65	4225
4.	60	3600
5.	60	3600
6.	65	4225

No.	x_i	x_i^2
7.	50	2500
8.	65	4225
9.	75	5625
10.	60	3600
11.	70	4900
12.	60	3600
13.	65	4225
14.	60	3600
15.	50	2500
16.	75	5625
17.	70	4900
18.	60	3600
19.	70	4900
20.	75	5625
21.	75	5625
22.	50	2500
23.	45	2025
24.	55	3025
25.	45	2025
26.	40	1600
27.	35	1225
28.	60	3600
$\sum$	1.685	104.525

n= 28

$\sum x_i = 1.685$

$\sum x_i^2 = 104.525$

So,

$S^2 = \dfrac{n \sum x_1{}^2 - (\sum x_i)^2}{n\,(n-1)}$

$= \dfrac{28\,(104.525) - (1.685)^2}{28\,(28-1)}$

$= \dfrac{2.926.700 - 2.839.225}{756}$

$= \dfrac{87.475}{756}$

$S^2 = 115{,}707$

The formula was used to test hypothesis was:

X- IPA and X-IPS[1]:

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

$$F = \frac{124,971}{115,707}$$

$$= 1,080$$

Because in t distribution does not get the value for $(1-\frac{1}{2}\alpha)$ and dk=(n_1+n_2-2)= $(30+28-2) = 56$, for $\alpha=0,05$ so the table is searched by interpolation.

$$I = \frac{r - t_{value}}{r - df} \quad \text{where } I= \text{interpolation value}$$

$r - t_{value}$= range (the difference between the t values in the table from two closest dk)

The position of dk 56 is between dk 40 dan dk 60, t value for dk 40= 1,684 while t value for dk 60= 1,671, so range of t value = 1,684 – 1,671= 0,013

r- df = range from two closest value = 60-40=20 so,

$$I = \frac{r - t_{value}}{r - df} \text{ x (df – lowest df)}$$

$$I = \frac{0,013}{20} - (56 - 40)$$

$$I = 0,00065 \text{ x } 16$$

$$= 0,0104$$

t value for dk=56= t value for dk= 40- I = 1,684 – 0,0104

$$= 1,6736$$

After do the calculation the researcher found that F_{count} = 1,080 with α=5% and dk=56 after do the interpolation the calculation for dk 56= 1,6736, cause $F_{count} < F_{table}$ (1,080 < 1,6736). So there is no difference the variant between the X-IPA class and X-IPS[1] class. It means that the variant is homogenous.

APPENDIX 11

T-test of the Both Averages in Pre-Test

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

$$Tt = \frac{M_1 - M_2}{\sqrt{(\frac{(n_1-1)s_1{}^2+(n_2-1)s_2{}^2)}{n_1+n_2-2})(\frac{1}{n_1} + \frac{1}{n_2})}}$$

$$Tt = \frac{48,12 - 50,04}{\sqrt{(\frac{(30-1)81,178+(28-1)130,291}{30+28-2})(\frac{1}{30} + \frac{1}{28})}}$$

$$t = \frac{48,12 - 50,04}{\sqrt{(\frac{(29)81,178+(27)130,291}{56})(0,03 + 0,03)}}$$

$$t = \frac{48,12 - 50,04}{\sqrt{(\frac{2.354,162+3.517,857}{56})(0,06)}}$$

$$t = \frac{48,12 - 50,04}{\sqrt{(\frac{5872,019}{56})(0,06)}}$$

$$t = \frac{48,12 - 50,04}{\sqrt{(104,857(0,06)}}$$

$$t = \frac{-1,92}{\sqrt{6,29}}$$

$$t = \frac{-1,92}{2,50}$$

$$t = -0,768$$

Based on researcher calculation result of hypothesis test of both of avarages, researcher found that t_{count} = -0,768 with opportunity $(1-\alpha)$= 1 - 5% = 95% and dk =n1+n2-2= 30+28-2= 56, researcher found that t_{table} =1,67252 cause $t_{count} < t_{table}$ (-0,768<1,67252). So, Ha was rejected, it means that there is no difference in average between experimental class and control class in pre test.

APPENDIX 12

T-test of the Both Averages in Post-Test

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

$$Tt = \frac{M_1 - M_2}{\sqrt{(\frac{(n_1-1)s_1{}^2+(n_2-1)s_2{}^2)}{n_1+n_2-2})(\frac{1}{n_1}+\frac{1}{n_2})}}$$

$$Tt = \frac{71,31 - 57,81}{\sqrt{(\frac{(30-1)124,971+(28-1)115,707}{30+28-2})(\frac{1}{30}+\frac{1}{28})}}$$

$$t = \frac{71,31 - 57,81}{\sqrt{(\frac{(29)124,971+(27)115,707}{56})(0,03+0,03)}}$$

$$t = \frac{71,31 - 57,81}{\sqrt{(\frac{3.624,159+3.124,089}{56})(0,06)}}$$

$$t = \frac{71,31 - 57,81}{\sqrt{(\frac{6748,248}{56})(0,06)}}$$

$$t = \frac{71,31 - 57,81}{\sqrt{(120,504)(0,06)}}$$

$$t = \frac{13,5}{\sqrt{7,23}}$$

$$t = \frac{13,5}{2,68}$$

$$t = 5,037$$

Based on researcher calculation result of hypothesis test of both of avarages, researcher found that t_{count} = 5,037 with opportunity $(1-\alpha)$= 1 - 5% = 95% and dk =n1+n2-2= 30+28-2= 56, researcher found that t_{table} =1,67252 cause $t_{count}>t_{table}$ (5,037>1,67252). So, Ha was accepted, it means that there was a difference average between experimental class and control class in post test. It can

be conclude that there was the significant effect of Jigsaw Technique towards Students' Writing Ability at Grade X Students of MAS Darul Ulum Sipaho Pemadu.

APPENDIX 13

INDICATOR OF WRITING DESCRIPTIVE TEXT

IN PRE-TEST AND POST-TEST

A. Assessment Indicator of Writing Descriptive Text in Pre-Test of Experimental Class

No.	Initial Name of Students	Indicator of Writing					Total Score
		Aspect Score					
		Content (C)	Organization (O)	Grammar (G)	Vocabulary (V)	Mechanics (M)	
1.	LAH	3	3	3	2	2	65
2.	DHH	2	2	1	2	2	45
3.	JAS	3	3	2	2	3	65
4.	TMH	2	2	1	1	2	40
5.	DN	3	2	2	2	2	55
6.	IST	3	3	2	3	3	70
7.	AH	3	2	2	2	2	55
8.	APH	3	3	2	2	2	60
9.	MYN	2	2	1	1	1	35
10.	LS	3	3	2	2	2	60
11.	RH	2	2	2	3	2	55
12.	AGS	3	2	2	3	2	60
13.	NYH	2	2	2	2	2	50
14.	SSRH	3	2	2	2	2	55
15.	ISH	2	3	2	2	2	55
16.	IM	2	2	2	2	2	50
17.	FS	2	1	1	2	1	35
18.	RS	3	2	1	2	2	50
19.	AFS	3	2	2	2	3	60
20.	MSS	2	2	1	2	2	45
21.	FAS	2	2	2	2	2	50
22.	AR	2	2	2	2	2	50
23.	DAN	3	2	1	1	2	45
24.	SS	2	2	1	1	1	35
25.	SHH	2	2	2	2	2	50
26.	NHS	3	2	2	2	1	50
27.	SNN	2	2	1	1	2	40
28.	SP	2	2	2	2	2	50
29.	RAP	2	2	1	1	1	45
30	HH	3	2	1	1	2	45

B. Assessment Indicator of Writing Descriptive Text in Post-Test of Experimental Class

No.	Initial Name of Students	Indicator of Writing					Total Score
		Aspect Score					
		Content (C)	Organization (O)	Grammar (G)	Vocabulary (V)	Mechanics (M)	
1.	NAP	3	3	2	2	2	60
2.	SPS	3	3	3	2	2	65
3.	HHS	3	3	2	3	3	70
4.	SF	2	2	1	2	2	45
5.	AH	3	2	1	2	1	45
6.	RH	3	2	1	2	2	50
7.	SHH	2	2	2	2	2	50
8.	ISH	3	3	3	2	2	65
9.	SS	3	3	2	3	3	70
10.	SSRH	4	3	3	3	3	80
11.	LS	3	3	2	3	3	70
12.	MSS	2	2	2	2	2	50
13.	DHH	3	2	2	3	2	65
14.	IMM	3	2	2	2	2	55
15.	RSS	4	3	3	3	3	80
16.	FAS	3	3	2	3	3	70
17.	ARS	3	3	2	2	2	60
18.	FS	4	2	2	3	3	70
19.	TMH	4	2	3	2	2	65
20.	NHS	3	3	2	3	3	70
21.	IST	4	3	3	3	4	85
22.	DN	3	3	2	3	3	70
23.	LHS	4	3	2	2	3	70
24.	JAS	3	3	2	2	2	60
25.	DAN	4	3	3	3	4	85
26.	MYN	4	3	3	3	3	80
27.	AGS	4	3	2	3	3	75
28.	SNN	4	3	2	3	3	75
29.	NY	4	3	2	3	3	75
30	APH	3	4	2	3	3	75

C. Assessment Indicator of Writing Descriptive Text in Pre-Test of Control Class

No.	Initial Name of Students	Aspect Score					Total Score
		Content (C)	Organization (O)	Grammar (G)	Vocabulary (V)	Mechanics (M)	
1.	M	3	3	2	3	3	70
2.	TW	3	3	2	3	2	65
3.	DI	3	2	2	2	2	55
4.	MAP	4	2	2	3	3	70
5.	NFH	2	2	1	1	1	35
6.	SRH	2	2	2	2	2	50
7.	AAH	3	2	1	1	2	45
8.	SRS	3	3	2	3	2	65
9.	MKN	3	2	2	2	2	55
10.	NGH	2	2	1	1	1	35
11.	NZKS	3	3	3	3	3	75
12.	WAS	3	3	2	2	3	65
13.	S	3	2	2	2	2	55
14.	YAS	3	3	2	2	3	65
15.	KNS	2	2	1	2	1	40
16.	TSD	2	2	2	2	3	60
17.	MSH	2	2	2	2	3	55
18.	RHH	2	2	2	2	2	50
19.	WR	2	1	2	1	1	35
20.	SAS	2	2	2	2	2	50
21.	ISN	3	2	2	2	2	55
22.	FHH	2	2	2	3	2	55
23.	IAS	3	2	2	2	3	60
24.	MS	3	2	2	2	3	60
25.	FYS	3	2	1	1	2	45
26.	AH	3	2	1	1	2	45
27.	RSH	3	2	2	2	3	60
28.	RFD	2	2	1	1	1	35

D. Assessment Indicator of Writing Descriptive Text in Post-Test of Control Class

No.	Initial Name of Students	Indicator of Writing					Total Score
		Aspect Score					
		Content (C)	Organization (O)	Grammar (G)	Vocabulary (V)	Mechanics (M)	
1.	RS	3	2	2	2	3	60
2.	MS	3	3	2	2	3	65
3.	NZK	3	3	2	2	3	65
4.	AAH	3	2	2	2	3	60
5.	FHH	3	2	2	2	3	60
6.	SRD	3	3	2	2	3	65
7.	DI	3	2	2	2	2	50
8.	ISN	4	3	2	2	2	65
9.	M	4	3	3	3	3	75
10.	MAP	3	3	2	2	2	60
11.	YAS	3	3	3	2	2	70
12.	NGH	3	2	2	2	3	60
13.	WAS	3	4	2	2	2	65
14.	TSD	3	3	2	2	3	60
15.	RFD	3	2	1	2	2	50
16.	FYS	4	3	2	3	3	75
17.	WR	4	3	2	3	2	70
18.	KHS	3	3	2	2	2	60
19.	SRS	4	3	2	3	2	70
20.	TW	4	3	2	3	3	75
21.	AAH	4	3	2	3	3	75
22.	PN	2	2	2	2	2	50
23.	MKN	3	2	1	2	1	45
24.	IA	3	2	2	2	2	55
25.	RHH	3	2	1	1	2	45
26.	MSH	2	2	1	1	2	40
27.	AH	2	2	1	1	1	35
28.	NFH	3	3	2	2	2	60

APPENDIX 14

GAIN SCORE OF EXPERIMENTAL CLASS AND CONTROL CLASS

Class	Pre-test	Post-test	Enhancement	Gain score
Experimental	48,12	71,31	23,19	15,42
Control	50,04	57,81	7,77	

APPENDIX 15

DOCUMENTATIONS

The students did pre-test (experimental class)

The researcher explained the jigsaw technique and started to devided the group

The home group

The expert group

Every group did the discussion based on their material

Group 1 discussion about Bahal Temple

Group 2 discussion about Lake Tao

Group 3 discussion about Pandan Beach

Group 4 discussion about Aek Sijornih

Group 5 discussion about Mosque Raya Gunungtua

Each group working together to solve the task

The students did pre-test (Control Class)

The researcher explained descriptive text

The researcher asked the students for grouping with their friendmates

The researcher shared the material, every group got the differents material

The students were doing the discussion

The group of Bahal Temple described their result to the group of Lake Tao

STUDENTS WORKSHEET

(POST-TEST)

Name : (1) ame Halomoan Haribuan

Class : X IPA

Bahal Temple

Bahal Temple in (the) Sportibi, Padang lawas cetenron
is education are much mean because beakful
Bahal Temple feual education from sumata
are Beautiful.

all man are enter to Bahal temple
Buy cartis Big Rp5.000.00 words Bahal Temple
to awale up stone to climb ta sky are
Color orange are Clear and fine for fotografer
with friends and family and dowling
for so to recall forever

(65)

C : 30
O : 20
6 : 20
V : 30
M : 20
Σ/130 = 65

Nomor : B - 903   /In.14/E.1/TL.00/09/2020   24 September 2020
Hal   : Izin Penelitian
          Penyelesaian Skripsi.

Yth. Kepala MAS Darul Ulum Sipaho Pemadu
Kabupaten Padang Lawas Utara

Dengan hormat, bersama ini kami sampaikan bahwa :

Nama   : Imanda Putri Harahap
NIM   : 1620300029
Program Studi   : Tadris/Pendidikan Bahasa Inggris
Fakultas   : Tarbiyah dan Ilmu Keguruan

adalah Mahasiswa Fakultas Tarbiyah dan Ilmu Keguruan IAIN Padangsidimpuan yang sedang menyelesaikan Skripsi dengan Judul "The Effect of Jigsaw Technique Towards Students' Writing Ability at Grade X MAS Darul Ulum Sipaho Pemadu".

Sehubungan dengan itu, kami mohon bantuan Bapak/Ibu untuk memberikan izin penelitian sesuai dengan maksud judul diatas.

Demikian disampaikan, atas kerja sama yang baik diucapkan terimakasih.

a.n. Dekan
Wakil Dekan Bidang Akademik

Dr. Ahmad Nizar Rangkuti, S.Si., M.Pd.
NIP. 19800413 200604 1 002

: 18/YPEMADU-1/II/SK/X/2020

Sipaho, 17 Oktober 2020

: -

: Izin Penelitian

Penelitian Skripsi

Kepada Yth,

DEKAN FAKULTAS TARBIYAH DAN ILMU KEGURUAN

IAIN PADANGSDIMPUAN

Di

Padangsidimpuan

Assalamu'alaikum Wr.Wb

Berdasarkan surat Nomor : B-983/In.14/E.1/TL.00/09/2020 tentang Izin Penelitian Penyelesaian Skripsi kepada mahasiswa yaitu :

Nama   : IMANDA PUTRI HARAHAP
NIM   : 1620300029
Program Studi   : Tadris/Pendidikan Bahasa Inggris
Fakultas   : Tarbiyah dan Ilmu Keguruan
Judul Skripsi   : " The Effect of Jigsaw Technique Towards Students' Writing
                  Ability at Grade X MAS darul Ulum Sipaho Pemadu"

Dengan ini memberikan izin kepada mahasiswa tersebut untuk melakukan penelitian mulai tanggal 1 s.d 15 Oktober 2002 dalam rangka penyelesaian skripsi.

Demikian Surat Izin ini dibuat dengan sebenarnya untuk dapat dipergunakan sebagaimana mestinya.

Wassalamu'alaikum Wr.Wb

Kepala Madrasah

H.SITI ASIAH HARAHAP, S.Ag
NIP.197206201999032003