



**THE EFFECT OF APPLYING DISCOVERY LEARNING METHOD
ON THE STUDENTS' ABILITY IN WRITING DESCRIPTIVE TEXT
AT SECOND GRADE OF SMK AL-WASHLIYAH 3 MEDAN**

A SKRIPSI

*Submitted to Faculty of Tarbiyah and Teachers Training of State Islamic
University of North Sumatera Medan as a partial Fulfillment of the
Requirements for the Degree of Sarjana Pendidikan (S-1 Program)*

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STATE ISLAMIC UNIVERSITY OF NORTH SUMATERA
MEDAN**

2018



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Maka kami menilai bahwa skripsi ini sudah dapat diterima untuk di
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Demikian kami sampaikan, atas perhatian Bapak kami ucapkan terima
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Menyatakan dengan sebenarnya bahwa skripsi yang saya serahkan ini benar-benar merupakan hasil karya sendiri kecuali kutipan-kutipan dari ringkasan-ringkasan yang semuanya telah saya jelaskan sumbernya.

Apabila di kemudian hari terbukti atau dapat dibuktikan skripsi ini hasil jiplakan, maka gelar ijazah yang diberikan Universitas batal saya terima.

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ABSTRACT

Novriana Rahma Siagian. The Effect of Applying Discovery Learning Method on The Students' Ability in Writing Descriptive Text At Second Grade of SMK Al-Washliyah 3 Medan

Skripsi, Medan: Department of English Education, Faculty of Tarbiyah and Teachers' Training, State Islamic University of North Sumatera, Medan 2018.

Keywords : Writing and Discovery Learning

The aim of this research is to find out the effect of applying Discovery Learning method on the students' ability of the second grade students at SMK Al-Washliyah 3 Medan. This research was experimental research. The population of this research was all the students of the second grade students at SMK Al-Washliyah 3 Medan. The population consisted of two classes. The two classes were taken as the sample. The samples of this research were taken 46 that was taken randomly. The students of experimental group (class Ap) was 24 students and 22 students of control group (Class Ak). The instrument of collecting data was test. After analyzing the data, the writer got; (1) The students' writing ability by using Discovery Learning method got the mean 73,75 (2) The students' writing ability by using Conventional method got the mean 62,90. The value of t_{observed} was 2.40 and the value of t_t from the df (44) on the degree of significance of 5% is 2,02. It means that t_o (t observation) is higher than t_t (t table). So, the alternative hypothesis is accepted. It means that there was an effect of Discovery Learning method on the students' writing ability of second grade students at SMK Al-Washliyah 3 Medan.

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This Skripsi is presented to English Education Department, Faculty of Tarbiyah and Teachers' Training State Islamic University of North Sumatera Utara as a partial fulfillment of the requirements for the degree of S.Pd.

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Finally, the writer realizes that this skripsi is still far from being perfect. Therefore, constructive suggestion is needed for the progress of the next study. The writer hopes that this research will give an important contribution to the Department of English Education. May God always bless us and lead us in His right path. Amin.

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CHAPTER I

INTRODUCTION

A. The Background of the Problem

Language is a tool of communication. By understanding language we have to habituate ourselves to be able to speak our own language well. In this world, there are many languages based on their regions, so that every society has different language. It is impossible if human make a relationship but the language is different. That is why the government declare to make an international language as a tool to achieve human being's goal. In order to be familiar for all of human being, so it can avoid misunderstanding between them.

In this case, English has been taught in many schools, especially in our country; Indonesia. One of them is SMK Al-Washliyah 3 Medan. The purpose of the English study at SMK Al-Washliyah 3 Medan is to make the students able to learn and apply the language in their daily life. The crucial basic skill is speaking because speaking is main communication to express human being's feeling directly. Speaking is a main skill to make a communication directly with other people. Besides, writing is the second important skill in English after speaking. Both of them have a relationship. Speaking refers to language interactions where language most closely accompanies action, whereas the writing refers to language as a reflection.¹

Based on the observation at SMK Al-Washliyah 3 Medan especially in second grade, there are many problems that find in writing skill. The students'

¹ Jenny Hammond, et.all., *English For Social Purposes*, (Australia: National Centre for English Language, 1992), p.5.

ability in writing descriptive text is still low. It is because the students lack of vocabulary. Another reason is because the teaching-learning process only depend on the strength of memory and the students have low understanding of grammar..

When the researcher conducted an observation in the classroom, the teacher instructed the students to memorize all the familiar words on the whiteboard and in the next meeting the teacher tested some of the students to say the words and mention their meaning. The students found difficulties to start writing. It was because the students are often confuse to express their ideas in writing.

They students do some mistakes to arrange sentence by sentence grammatically. The students also get some problems in writing descriptive text, they assumed that they can not master all about grammar and it makes them confused and difficult to understand. From the teacher, it can be seen by the method that the teacher used. It's too monotonous method. The teachers explained then gave the students some exercises. So the students got the impact of the method which make them bored and have no interesting in learning about writing English for Descriptive Text.

To solve the problem above, the students need a technique or method to help them understanding the new words easily. The technique or method is a tool to achieve a goal. The method that is needed to improve their ability in writing descriptive text is a method that can make the students easy in expressing their ideas, to arrange the words to be a good sentence. One of the method that can make the students find it easy to express and organize their ideas is Discovery Learning Method.

Discovery Learning Method is a method which gives a chance for the students to observe, think, ask, and discover the material by themselves. Beside that, the Discovery Learning Method emphasizes on the learning process. So, in this case, the students are as the problem solvers because the model is going to be students-centered. One of the psychological aspect that really influence the students to improve their ability in writing descriptive text is creativity. In writing, creativity is also important to produce a good, acceptable, and understandable writings. Creativity itself is the ability of someone in creating new idea which can be seen from fluency, flexible, and originality of thinking by previous knowledge or skills to a new situation.

That is why the researcher will use the Discovery Learning Method on the students' ability in writing descriptive text. It is because this method have some benefits that are offered by the Discovery Learning in the English teaching-learning process, especially in writing skill. One of the benefit is supporting students' problem solving ability in writing descriptive text.

The writer had an opportunity to do an observation at the second grade at of SMK Al-Wahliyah 3 Medan. Most of students have difficulties to write, understanding the definition of descriptive text and mastering the grammar and vocabularies. The teacher in that school who teaches at the second grade still uses conventional method that makes the students feel bored, so their ability in writing descriptive text is still low.

Based on the problems discussed previously, the writer makes a study under the title **“The Effect of Applying Discovery Learning Method on The Students’ Ability in Writing Descriptive Text At Second Grade of SMK Al-Washliyah 3 Medan”**

B. The Identification of the Problem

The identified problems in this study are :

- a. The students’ ability in writing descriptive text is still low.
- b. The students often make mistakes and get troubles in writing.
- c. The teacher does not use any various methods in teaching writing especially in writing descriptive text.

C. The Formulation of the Problem

Based on the background above, the research problem can be formulated as follow :

Is there any significant effect of Discovery Learning Method on the students’ ability in writing descriptive text at second grade of SMK Al-Washliyah 3 Medan?

D. The Objective of the Study

Based on the formulation of study, the aims of study according to the researcher are as follow:

To discover the significant effect of Discovery Learning Method in writing descriptive text at second grade of SMK Al-Washliyah 3 Medan.

E. The Significances of the Study

The findings of this study are expected to be useful and relevant for:

1. Theoretical Significance

Theoretically, the result of this research is to develop and enhance the concept and knowledge about teaching writing descriptive text by applying Discovery Learning Method.

2. Practical Significance

Practically, for the English teachers, to select the Discovery Learning Method as better way in increasing students' achievement in writing descriptive text. For the students, to improve the students' ability in writing descriptive text by applying Discovery Learning Method. For the next reseachers, to develop the knowledge about teaching writing descriptive text by applying Discovery Learning Method.

CHAPTER II

REVIEW OF LITERATURE

A. Theoretical Framework

In conducting this research, theories are needed to explain some concepts or terms, to avoid misunderstanding and to make the same perception between the researcher and the reader. The terms need to be clarified. The terms function is to give the limited concept, which specially meant in particular context. Theoretical framework of this research is presented and discussed as follows:

1. Ability in Writing Descriptive Text

Ability is the quality of state of being able competence in doing (skill) or natural attitude proficiency.² In addition, ability is skill or power.³ Ability as same as with potential in human. Every human has human ability, to develop it they have to do something. The students' ability is concerned with how a student has performed in relation to a particular course or program. The ability usually come at the end of program, and are deliberately based on the content covered it.

The students will be successful if they are able to produce writing by using their own words. The students must be able to create a text using their own ideas and words. So, the conclusion is that ability is a thing done successfully in reaching particular goal, statues, or a standard, especially by effort, skill, courage,

²Merriam, "DictionaryAbility", <http://www.merriamwebster.com/dictionary/ability>, Accessed on August 1st, 2016 at 10.34 AM

³Oxford University Press, *Oxford Learner pocket Dictionary*, (New York: Oxford University Press), p.1

etc. It must be owned three aspects of ability, namely, cognitive, affective and psychomotor.

Hornby states that ability was a skill or power⁴. David Nunan stated that one of the reasons for teaching writing was that writing as a skill⁵; whether physical skills or cognitive skills. Writing skills are specific abilities which help writers put their thoughts into words in a meaningful form.

Melgis Dilkawati Pratama in her research discussed about the factors influencing ability in writing. She found that there are actually four factors that influence the students' skill in writing. They are⁶ fear factors, the students are afraid to write. Reading, reading can also influence the students' writing skill because reading becomes one of media for writers to gain information that they will deliver it to their text. Writing Environment. When the writing become their habit, it will be useful to improve their writing skill. Teaching Technique. The way the teacher applies in teaching writing will influence the students' writing skill. Muslim in his research discussed about the factors influencing students' ability in writing is that students' mastery in vocabulary.

A good vocabulary can help us to say what we mean. Fauziah Hasan in her research found that there are three factors that the students are weak in writing, they are limited opportunities to use English outside classroom, negative attitude toward English, lack of confident

⁴ A.S. Hornby. *Oxford Learner's Pocket Dictionary*. Oxford: Oxford University Press, 1983), p. 1

⁵ David Nunan. *Practical English Language Teaching: Young Learners*. (New York: Mc.Graw-Hill Company, 2005), p. 99

⁶ Melgis Dilkawati. *The Effect of Using the Tell Show Strategy toward the Ability in Writing Descriptive Text of the First Year Students at Senior High School Al-Huda Pekanbaru*. (Graduated Thesis: UIN SUSKA RIAU, 2013), P. 22-23

Based on the theories above, there are some factors influencing students ability in writing, they are: fear factor, reading, writing environment, teaching technique, vocabulary, limited opportunities to use English outside classroom, negative attitude toward English, and lack of confident.

a. Writing

A successful and effective communication can be achieved through the use of correct and appropriate language that fits to situation, and a good command of vocabulary and grammar are essential. The mastery of these language components is partly supported through learning the four basic English skills, and one of very important basic skills of learning English is writing.

Writing is about expressing idea that a writer is unable to express what a speaker able to express, such as gesture, body movement, facial expression, pitch and tone of voice, stress and hesitation.⁷

Thus, a writer has to be able to write an effective writing in order to make a reader understands by developing and organizing ideas, a careful vocabulary choice, grammatical pattern, and sentence structure to make something appropriate to the subject matter and the eventual readers.

Writing is the most difficult skill in English, the writer should master English grammar, and the language is used in writing completely different from the language used in spoken language and the word choice in writing is strictly chosen to make the writer's idea make sense. In conclusion, in writing the writer must know the grammar and vocabulary to create and generate the ideas or

⁷Tricia Hedge, *Writing*, (Oxford: Oxford University Press, 1988), p. 5

thoughts and by using Brainwriting Strategy the writers can generate or create their ideas in by discussing the whole thing that exist in writing.

In addition, by writing the students can express their feelings, ideas and thoughts. Allah SWT also tells us to write as written in Al Qur'an, surah Al Alaq verse 1-5 as follows:



The meaning: 1. Recite in the name of your Lord who created . 2. Created man from a clinging substance. 3. Recite, and your Lord is the most Generous. 4. Who has taught (the writing) by the pen (the first person to write was Prophet Idrees). 5. Has taught man that which he knew not.⁸

From the verse above we can see in the fourth and fifth verse that Allah not only ask the students but Allah tells all people that writing skills is very important to be learned. By writing every people can express what was Allah created to us and understand the incredible creation for us as a Muslims. Allah also taught us write before we knew not.

In the Holy Qur'an surah Al Qalam verse 1, also explains that writing is one of important skills that should be learned and the existence of writing, as follows:

⁸Muhammad Muhsin, *The Noble Qur'an English Translation of Meaning and the Commentary*, (Madinah: King Fahd complex of the Holy Qur'an) p. 824

ن وَالْقَلَمِ وَمَا يَسْطُرُونَ ﴿١﴾

The meaning: *Nun, by the pen and by the (Record) which (men) write.*

In Islam writing is also one of the important skills that should be learning.

The writer is needed to make agreement about Islam rules; In fact, the writer should have two characteristic: the first is fair and the second is to knowing Islamic rules to make suitable with Islam rules. This based on the verse in holly

Al-Qur'an Albaqarah : 282

يَأْتِيهَا الَّذِينَ ءَامَنُوا إِذَا تَدَايَنْتُمْ بِدَيْنٍ إِلَى أَجَلٍ مُّسَمًّى فَآكْتُبُوهُ وَلْيَكْتُبَ بَيْنَكُمْ كَاتِبٌ بِالْعَدْلِ وَلَا يَأْبَ كَاتِبٌ أَنْ يَكْتُبَ كَمَا عَلَّمَهُ اللَّهُ فَلْيَكْتُبْ وَلْيُمْلِلِ الَّذِي عَلَيْهِ الْحَقُّ وَلْيَتَّقِ اللَّهَ رَبَّهُ وَلَا يَبْخَسَ مِنْهُ شَيْئًا فَإِنْ كَانَ الَّذِي عَلَيْهِ الْحَقُّ سَفِيهًا أَوْ ضَعِيفًا أَوْ لَا يَسْتَطِيعُ أَنْ يُمِلَّ هُوَ فَلْيُمْلِلْ وَلِيُّهُ بِالْعَدْلِ وَاسْتَشْهِدُوا شَهِيدَيْنِ مِنْ رِجَالِكُمْ فَإِنْ لَمْ يَكُونَا رَجُلَيْنِ فَرَجُلٌ وَامْرَأَتَانِ مِمَّنْ تَرْضَوْنَ مِنَ الشُّهَدَاءِ أَنْ تَضِلَّ إِحْدَاهُمَا فَتُذَكَّرَ إِحْدَاهُمَا الْأُخْرَىٰ وَلَا يَأْبَ الشُّهَدَاءُ إِذَا مَا دُعُوا وَلَا تَسْمَعُوا أَنْ تَكْتُبُوهُ صَغِيرًا أَوْ كَبِيرًا إِلَىٰ أَجَلِهِ ذَٰلِكُمْ أَقْسَطُ عِنْدَ اللَّهِ وَأَقْوَمُ لِلشَّهَادَةِ وَأَدْنَىٰ أَلَّا تَرْتَابُوا إِلَّا أَنْ تَكُونَ تِجَارَةً حَاضِرَةً تُدِيرُونَهَا بَيْنَكُمْ فَلَيْسَ عَلَيْكُمْ جُنَاحٌ أَلَّا تَكْتُبُوهَا وَأَشْهِدُوا إِذَا تَبَايَعْتُمْ وَلَا يُضَارَّ كَاتِبٌ وَلَا شَهِيدٌ وَإِنْ تَفَعَّلُوا فَإِنَّهُ فُسُوقٌ بِكُمْ وَاتَّقُوا اللَّهَ وَيُعَلِّمُكُمُ اللَّهُ وَاللَّهُ بِكُلِّ شَيْءٍ عَلِيمٌ ﴿٢٨٢﴾

Meaning :

O you who have believed, when you contract a debt for a specified term, write it down. And let a scribe write [it] between you in justice. Let no scribe refuse to write as Allah has taught him. So let him write and let the one who has the obligation dictate. And let him fear Allah, his Lord, and not leave anything out of it. But if the one who has the obligation is of limited understanding or weak or unable to dictate himself, then let his guardian dictate in justice. And bring to witness two witnesses from among your men. And if there are not two men [available], then a man and two women from those whom you accept as witnesses - so that if one of the women errs, then the other can remind her. And let not the witnesses refuse when they are called upon. And do not be [too] weary to write it, whether it is small or large, for its [specified] term. That is more just in the sight of Allah and stronger as evidence and more likely to prevent doubt between you, except when it is an immediate transaction which you conduct among yourselves. For [then] there is no blame upon you if you do not write it. And take witnesses when you conclude a contract. Let no scribe be harmed or any witness. For if you do so, indeed, it is [grave] disobedience in you. And fear Allah . And Allah teaches you. And Allah is Knowing of all things.

(Q.S Al-Baqarah: 282)⁹

And there are also Hadith that discuss about education.

The Holy Prophet (blessings and peace be upon him) said:

«طَلَبُ الْعِلْمِ فَرِيضَةٌ عَلَى كُلِّ مُسْلِمٍ».

Acquisition of knowledge is binding on all Muslims (both men and women without any discrimination). [Narrated by Ibn Maja in al-Sunan, 1:81 §224.

The Holy Prophet (blessings and peace be upon him) also said at another place:

«أَطْلُبُوا الْعِلْمَ وَلَوْ بِالصَّيْنِ».

Acquire knowledge even if you may have to go to China for it. [Narrated by al-Bazzar in al-Musnad, 1:175 §95.]

⁹ Abdullah Yusuf Ali, The Meaning of the Holy Qur'an. United States of America: Amana Publication. 2001.p. 1436

Based on the verse, Allah SWT explained that He taught human being by pen (Qalam). The “pen” indicates the basic foundation of the knowledge that come through writing. The discovery of pen and writing are the greatest gifts from Allah SWT. By writing, one generation can transfer their knowledge to the next generation. It shows that the tool of writing and writing itself has important roles. Allah The Almighty says that writing is one of the ways to get knowledge to develop his or her knowledge and status in society. Therefore, by writing, a human gets knowledge.

In writing, a writer must has good ideas, has good feeling, good opinion and make creative in his own thinking to make a reader understand and satisfied. Writing is one of the skills to create our ideas, so writing can help us realize our individual potential and to achieve personal goals. Therefore, besides being an external activity through which we communicate with other, writing also serves our inner selves. It is clear that writing can be a tool for communication to communicate with others through writing down on papers to share our feeling or ideas.

Based on the definitions of writing above, it can be concluded that writing is an activity to record and communicate the writer’s ideas, consisting of main idea and key details, by using letters, words, phrases, and clauses to form a series of related sentences with the purpose to make the readers think of something, or do something, or both.

1. Writing Process

Writing is not an instant process. It takes time and engages so many activities. The activities are prewriting, drafting, revising, and editing. In the process of writing, the writers do not easily move from step to step. The writers sometimes need to double check before going to the next process, or sometimes they need to move backwards if they have an idea to add in their writing.¹⁰

a. Prewriting

Prewriting can be defined as the use of random ideas in developing text when the writer has lack inspiration. Prewriting is the first step; it is preparation step before writing process. Prewriting gives warming up the brain to gather the ideas to write about. If you are like many people. You may have trouble getting started with writing. A mental block may develop when you sit down before a blank sheet of paper. You may not be able to think of an interesting topic or thesis. Or you may have trouble coming up with relevant details to support a possible thesis. The activities in prewriting are brainstorming, free writing, collecting data, note taking and outlining.

b. Drafting

Drafting can be defined as writing down some ideas that come into mind. Then, this draft can be shaped and refined in the next stage. This first draft is usually rough, which is why it is called the rough draft. In drafting the writers

¹⁰Barbara Fine Clouse, *The Student Writer*, (Ohio: McGraw-Hill Education, 2012), p. 5-6

create their initial composition by writing down all their ideas in a n organized way to convey a particular ideas or present an argument.

c. Revising

Revising is a process when the writers rework the rough material of the draft to get it in shape. This process a time-consuming, difficult part or the process because the writers should express the ideas in the best order and in the best way, so the reader can get the writers' idea. The writers review, modify, and reorganize their work by rearranging, adding, or deleting content, and by making the tone, style, and content appropriate for the intended audience.

d. Editing

Editing is the last process of writing. In this process, the writers should hunt for errors especially in grammatical errors. The writers should edit more than once, so the writing can be free of errors. At this point in the writing process, the writers prooread and correct errors in grammar and mechanics, and edit to improve style and clarity. Having another writers' feedback in this stage is helpful.

2. The Component of Writing

Hughes stated that there were some aspects of making a good writing, they are¹¹ grammar, it is important to students to master it, because it is the basic to

¹¹ Arthur Hughes, *Testing for Language Teachers*. (Cambridge University Press: 1989), p.101-102

understand the language. Vocabulary, appropriate vocabulary should be mastered in order to make the writing process flows significantly. Mechanics included such as spelling, punctuation, and capitalization. Fluency is the use of correct structure and appropriate vocabulary to make the composition easy to understand and the last is form (organization)

3. Types of writing

Types of writing activities to perform writing should be based on the students' level and capacity. There are five categories of writing; a) imitative, it is at the beginning level of learning writing. The learners will simply write down English letter, words, and possibly sentences in order to learn the conventions of the orthographic code, b) intensive or controlled, this writing typically appears in controlled, written grammar exercise. This type of writing does not allow much creativity on the part of writer. A controlled writing is to present in which the learners have to alter a given structure throughout, c) self-writing, the most salient instance of this category in classroom is note-taking by the learners. Diary or journal writing belongs into this category, d) display writing, for all language learners, short answer exercises, essay examinations and research reports will involve an element of display. One of the academic skills of ESL learners that they need to master is a whole array of display writing techniques, e) real writing, some classroom writing aims at the genuine communication of messages to an audience in need of those messages.

4. The Purpose of Writing

The purpose of writing adopted by Hugo Harting are assignment purpose, the purpose of this assignment actually has no purpose at all. The author writes something because it is assigned, not of its own accord (eg the students assigned to summarize the book, the secretary is assigned to make a report or meeting minutes). Altruistic purpose, the author aims to please the reader, avoid the position of the reader, to help the reader understand, appreciate his feelings and reasoning, to make the reader's life easier and more enjoyable with his work. One can not write properly if he believes, both consciously and unconsciously that the reader or the connoisseur of his work is "opponent" or "enemy". The purpose of altruistic is the key to the readability of something written. Persuasive purpose (persuasive purpose), writing that aims to convince the reader of the truth of the idea being distributed.

Informational purpose (informational purpose, implementation purpose), writing that aims to provide information or information lighting / illumination to the readers, self-expressive purpose writings aimed at introducing or declaring the author to the reader. Creative purpose, this purpose is closely related to the purpose of self-statement. But creative desires here outweigh self-assertion and engage him with the desire to attain artistic norms, or ideal arts, the arts of art. This paper aims to achieve artistic values, art values. Problem-solving purpose (problem solving), according to Hipple, in writing like this the author wants to

solve the problems encountered. The author wants to explain, clear his own thoughts and ideas in order to be understood and accepted by the readers.¹²

5. Genre of writing

The genre perspective covers two distinctive dimensions in teaching and learning writing. First, genre is kind of text or writing work itself. It views that the language (writing form) must be related to social function. Second, genre as a process or strategy of how the writing work is developed, taught, and learned. In this case, there is a certain process of production and reproduction. Genre as an approach, of course provides some stages or steps to follow.

Basically, teaching and learning writing through genres approach is a matter of mixture among the process the text of writing, and social practice. Genre writing as a new approach to teaching and learning truly combines two things the product of the writing and the way or technique or strategy of how the product is produced.

According to Dirgeyasa, there are some genres of text in writing, they are descriptive text, description or descriptive is a text that describe or illustrate the object, person or idea by his/her eyes physically. Recount text, recount is a text that retelling or recounting of an event or an experience or recount is a text that retells events or experiences in the past. Narrative text, narrative text is a text that amuse, entertain and to deal with actual or vicarious experience in different ways. Narrative deal with problematic events which lead to a crisis or turning point of some kind, which in turn in a solution.

¹²HG. Tarigan, *Menulis Sebagai Suatu Keterampilan Berbahasa*, (Bandung: Angkasa, 2008), p.22-23

Procedure text, procedure text is a text that discusses and explains how something works or how something is done. Procedure text is a text that designed to describe how something is achieved through a sequence of actions or steps. Report text, report is a text to describe the way things in around of our environment are designed. Usually tells the natural or non natural phenomena or even social phenomena. Explanation text, explanation is a text that explaining a process of formation. This genre explain why an object exists as it is or to describe how an object works. Discussion text, discussion is a text which presents a problematic discourse. This problem will be discussed from different points of view.

Hortatory exposition text, hortatory exposition is a type of English text that belongs to the class of argumentation. Analytical exposition text, analytical expotision text is a text that elaborates the write's idea about the phenomenon surrounding. This genre will often involve the writer comparing opposite points of view, analyzing the arguments and concluding with an overriding opinion or conclusive argument. News item text news item is a text that informs the daily and real factual happenings in human life. Spoof text, spoof text is text that tells a funny incident or event that has happened in the past.

Anecdote text, anecdote is a text that shares with others an account of an unusual or amusing incident. Commentary text, commentary is a text that uses analysis and interpretation to find patterns of meaning in events, trends, and ideas. Book review text, book review is both a description and an evaluation of book. It should focus on the book's purpose, contents, and authority. Critical review text,

critical review is the summarization and evaluation of the ideas and information in an article.¹³

6. Teaching Writing

Jeremy Harmer asserted the reasons for teaching writing to students include reinforcement, language development, learning style, and writing as a skill, each of these are as follows: a) **reinforcement**: some students acquire languages in a purely oral/aural way, but most of us benefit greatly from seeing language written down, b) **language development**: we can't be sure, but it seems that the actual process of writing (rather like the process of speaking) helps us to learn as we go along, c) **learning style**: some students are fantastically quick at picking up language just by looking and listening. d) **writing as a Skill**: by far the most important reason for teaching writing, of course, is that it is a basic language skill, just as important as speaking, listening and reading.¹⁴

7. Strategy of Teaching Writing

Writing as the one of the four languages has always formed part of the syllabus in the teaching of English. Writing has always been used as a means of reinforcing language that has been taught. In other words, writing is a good way for students who learn English. They can put their idea on a piece of paper by paying attention on grammar rule and vocabulary.

¹³ Dirgeyasa, *Collage Academic Writing: A Genre-Based Perspective*, (Medan: Unimed Press, 2014), p.3

¹⁴ Jeremy Harmer. *How to Teach English*. (Pearson Education: 1998), p. 79

Teaching writing is not simple as teaching other language skills since it has conventional rules. By knowing the stages of writing process. The students are demanded to get the knowledge of how to write well. When writing, Indonesian students who learn English as foreign language need more time to think. Teacher asks students to focus on accurate language used and what ideas they will write. Moreover the students only have limited words or vocabulary. It can provoke their language development.

8. Effect

Effect is defined to change of ability that the students have after treated by using certain technique or gas of teaching¹⁵. Effect in this research means as any ability improvement after learning something. The effect is defined to change of ability that the students have after treated by using certain technique of teaching. The result of effect in teaching is the improvement of the students' achievement is the result of learning process which involves teachers with students. The improvement in which achievement by the students then realized in the form of score, so that it will be acknowledge the certain position of students in the class because the scores they have reflect their improvement in the learning process.

Effect can be defined as a result of an action or other cause¹⁶. The effect is a change that happens and produces a result because there is a cause. The effect is a change that results when something is done. The effect is very essential i deciding

¹⁵ Richard, J C & Renandya, W A. *Methodology in Language Teaching : An Anthology of Current Practice*. (Cambridge University Press: 2002), p. 133

¹⁶ Hawker and Soane, *Compact Oxford English Dictionary for University and College Students*, (New York: Oxford University Press, 2006), p. 317

and looking for a way out. If the effect is positive, the result can be positive as well as the expectation of the researcher, and otherwise.

In English writing is a significant skill that the students have to comprehend and master.

b. Descriptive Text

1. Definition of Descriptive Text

Descriptive text is a text which says what a person or thing is like. It means the characteristics of something. The generic structure of descriptive text such as: identification; identifying the phenomenon that is described, description; describing the phenomenon in parts, qualities and characteristics. Descriptive writing or text is usually also used to help writer develop an aspect of their work, to create a particular mood, atmosphere or describe a place. Descriptive text is one of the types of writing. In descriptive text, you describe a place, thing or person. When the writer describes a place, thing or person. Obviously, time order would not be logical. When you describe the way something looks, you have to describe it according to space order. You should arrange your sentences and details according to where the objects being described are located. In descriptive text, you have to make very clear the location of the object being described.

The genre of describing is one of the fundamental functions of any language system and one of the first skills emergent language users learn to control. Description enables the categorization or classification of an almost infinite range of experiences, observations and interactions into a system that orders them for immediate and future reference, and allows teacher to know them

either objectively or subjectively, depending on the learning area or intent of the writer. Describing is also a central feature of narrative texts providing the means for developing characterization, sense of place and key themes.¹⁷

2. Generic Structure

The generic structure of descriptive text is shown in the following table.

Tabel 2.1. Generic Structure of Descriptive Text¹⁸

Generic Structure	Function
Identification	Identification the person, place, or thing to be described
Description	Describes parts, qualities, and characteristics

3. Grammatical Features

In descriptive text, use ¹⁹specific nouns, e.g. my car, my new house etc. Simple present tense, e.g. I live in a simple house; the house is very beautiful; it has a wonderful park. Detailed noun phrase to give information about subject. E.g. I have white skinned girl friend, etc. Some adjectives (describing, numbering, classifying)., e.g. two strong legs, sharp white fangs, etc. Relating verbs to give information about subject, e.g. My mum is really cool: it has very thick fur, etc.

¹⁷ Peter Knap and Megan Watkins, *Genre, Text, Grammar*, (Australia: University of New South Wales Press, 2005), p. 97.

¹⁸ Hammound, *English for Social Purposes (A Hanbook for Teachers of Adult Literacy)*, Sydney: Maquarie University, 1992, p. 78.

¹⁹ Alexander Mongot Jaya, *English Revolution*, Jepara: Mawwaas Press, 2008, p. 14.

Thinking verb or feeling verb to express personal writer view about subject, e.g. police believed the suspect is armed; I think it is a clever animal, etc. Action verb, e.g. our new pappy bites our shoes; my cat eats mouse, etc. Adverbials to give addition information about its behavior, e.g. fast, at tree house, etc.

One of the text or paragraph that are taught in the Junior High School level is descriptive. Descriptive is a kind of text which is aimed to describe a particular person, place, or thing.

So, it can be said that this text is descriptive text that describes what kind of person or an object described, good shape, its properties, numbers and others. Objective (purpose) of any clear descriptive text, is to explain, describe or express a person or an object.

When writing a descriptive text, there are several general compositions or generic structure. It also has generic structure which is summarized as follows; identification which identifies phenomenon to be described. Identification contains about identifying things or person will be described. Description which describes parts, qualities, characteristics.

4. The Language Feature of Descriptive Text

The linguistic feature in this text is focused on specific participants, the use of attributive and identifying process, the frequent. Use of epithets and classifier in nominal groups, at and the use simple present tense. Moreover, according to George E. Wishon and Julia M. Burks in their book stated that Description reproduces the way things look, smell, taste, feel, or sound; it may also evoke moods, such as happiness, or happiness, loneliness, or fear. It is used

to create a visual image of people, place, even of units time-days, time of day, or season.²⁰

5. The Linguistic Features

The relevant grammatical patterns. The grammatical patterns or language usages of certain genre writing have their own distinct or specific features. This may occur because different genre writing states different and distinctive communicative purpose, readers, and contexts in terms of when it happens, how it happens, or why it happens.

The common grammatical features of narrative writing are; it mostly often uses the past tense, but may be in the immediate present for effect. It varies in sentence lengths: simple, compound, or complex. It tends to use short sentences to increase tension; longer sentences provide contrast and detail. The use of dialogue will develop action and characters. Tense may change within the dialogue. Active nouns: make nouns actually do something, e.g. “It was raining” could become “Rain splashed down” or “There was a large cabinet in the lounge could become “A large cabinet seemed to fill the lounge”.

Careful use of adjectives and adverbs: Writing needs judicious use of adjectives and adverbs to bring it alive, qualify the action and provide description and information for the reader. Use of the senses: where appropriate, the senses can be used to describe and develop the experiences, setting, and character:

What does it smell like?, What can be heard?, What can be seen – details?, What does it taste like?, What does it feel like?

²⁰ George E. Wishon and Julia M. Burks, *Let's Write English, Revised Edition*, (Canada: American Book Company, 1980), P. 379

In many cases, to make the story more stressful and stronger, the imagery language may be used. The types of imagery language may vary and it depends on the story itself and the writer's style. It sometimes shows the stylistics such as; simile: a direct comparison, using likes or as or as though, e.g. *The Sea looked as rumpled as a blue quilted dressing gown.* Or, *the wind wrapped me up like a cloak.* Metaphor: an indirect or hidden comparison, e.g. *She has a heart of stone* or *He is a stubborn mule* or *the man barked out the instructions.* Onomatopoeia: a suggestion of sound through words, e.g. *crackle, splat, ooze, squish, boom,* e.g. *The tyres whir on the road. The pitter-patter of soft rain. The mud oozed and squished through my toes.*

Personification: Giving nonliving things (inanimate) living characteristics, e.g. *The steel beam clenched its muscles. Clouds limped across the sky. The pebbles on the path were grey with grief.* The related vocabulary usages. In general, the related vocabulary usages of the narrative text are action verbs: action verbs provide interest to the writing. For example, instead of the old man was in his way and you can say the old man barred his path. Instead of she laughed you might choose she cackled.

It is written in the first person (I, we) or the third person (he, she, they). It uses material processes (behavioral and verbal). It uses temporal conjunction and temporal circumstances, it uses relational processes and mental processes, it focuses on specific and usually individualized participant. It uses circumstances of time and place. Setting – when and where the story occurs. Characters – the most important people or characters in the story. Initiating event – an action or occurrence that establishes a problem and/or goal. Conflict/goal – the focal point

around which the whole story is organized. Events – one or more attempts by the main characters to achieve the goal or solve the problem.

Resolution – the outcome of the attempts to achieve the goal. Time words connect events (e.g. After that....; Then....; A few moments later....) Specific nouns: Strong nouns have more specific meanings, e.g. oaks opposed to tree.²¹

6. The Students' Writing Ability in Descriptive Text

Syafi'i said that to arrange sentences and details according to where the objects being described are located. This type of organization is called special organization. In a descriptive text, we have to make very clear the location of the objects being described. Description of a place, a description of anything in writing should be clear. The following should be taken into consideration; the location of the objects should be clear, the details should be logically and systematically, so that it is easy to visualize the description in his mind, most importantly is that there should be a controlling idea that gives the paragraph focus.

Description of a person, you can describe a person's appearance in many ways such as his/her clothes, manner of speaking, color and style of hair, facial appearance, body shape, and expression. When you are writing a text that is entirely descriptive, you use vivid language to make whatever you are describing come alive. Indeed, readers typically visualize what they read, and so any manner in which you can help them along makes for a stronger paragraph. To make your descriptive writing come alive, there are some manners provided, such as; vivid

²¹I Wy.Dirgeyasa. 2016. *College Academic Writing: A Genre-Based Perspective*. Jakarta: Kencana. p. 18-20

language, successful descriptive paragraph uses words that come alive. Words can create pictures and impressions that appeal not only to the mind but also to the five senses: sight, sound, smell, taste, and touch. Thus, your words should create visual, auditory, olfactory, gustatory, and tactile impressions. Not how paragraph below conveys a clear impression of what is taking place.

Precise Language, use words and phrases that will turn the words on a flat page into a sensory experience for the reader. Bring out textures, colors, tastes, sights, sounds, and smells. Imagery, similes and metaphors make comparisons to enhance the reader's understanding of an experience or event. They create instant visual images in the reader's mind. Show doesn't tell, in order to affect a permanent image on the part of the reader, your description must be specific to the situation at hand. You must draw readers into your world.

7. Writing Assessment

Test of language were something that must be done by teachers in language learning. Through the assessment will be known objectively student learning outcomes. Assessment will get good result if aspects are assessed in writing presented in more detail.

According to Heaton, there are five scoring scales namely content, organization, vocabulary, language use, and mechanics.

1. Content

The scoring of the content depends on the students' capability to write their ideas and information in the form of logical sentences. The criteria of giving the score is as the following:

Table 2.2. Scoring scale of the content of a paragraph

Scoring Scale	Alternative Competence of Paragraph Content
30 – 27	Excellent to very good: knowledge, substantive
26 – 22	Good to average: some knowledge of subject, adequate range
21 – 17	Fair to poor: limited knowledge of subject, little substance
16 – 13	Very poor: does not show knowledge of subject, non substantive

2. Organization

The organization refers to the students' capability to write their ideas and information such a good logical order to topic and supporting sentences are clearly stated. The criteria of giving the score as the following:

Table 2.3. Scoring scale of organization of a paragraph

Scoring Scale	Alternative Competence of Paragraph Content
20 – 18	Excellent to very good: fluent expression, ideas

	clearly stated
17 – 14	Good to average: somewhat choppy, loosely organized, but the main ideas stand out
13 – 10	Fair to poor: non-fluent, ideas confused, and disconnected.
9 – 7	Very poor: does not communicate, no organization or not enough to evaluate

3. Vocabulary

The scoring of vocabulary depends on the students' capability to use words or idioms to express ideas logically. The criteria of scoring vocabulary are given below:

Table 2.4. Scoring scale of vocabulary of a paragraph

Scoring Scale	Alternative Competence of Paragraph Content
20 – 18	Excellent to very good: sophisticated, effective word choice and usage
17 – 14	Good to average: adequate range, occasional error of words/idiom choice, usage but meaning not obscured
13 – 10	Fair to poor: limited range, frequent errors of words/idioms form, choice, and usage
9 – 7	Very poor: essential translation, little knowledge of V

4. Language Use

Language use refers to competence in writing down the sentence either in simple. Complex or compound sentence correctly or logically. It also refers to the ability if using the arrangement in the sentences and some other words such as: nouns, adjectives and time signals. The criteria for scoring the language use are given below:

Table 2.5. Scoring scale of language use of a paragraph

Scoring Scale	Alternative Competence of Paragraph Content
25 – 22	Excellent to very good: effective complex constructions, little mistake in appropriate word function word, article pronoun, preposition
21 – 18	Good to average: effective but simple instruction, a little mistake in appropriate word
17 – 11	Fair to poor: major problem in simple/complex constructions, a little mistake in appropriate word, article, and preposition confused
10 – 5	Very poor: virtually no mastery of sentence construction rules, so many mistakes in sentences that is not communicatively, not enough to evaluate.

5. Mechanics

The score for mechanic depends on the students' competence to write spelling, punctuation, capitalization, paragraphing, and hand writing whether or not can be read. The criteria of scoring the mechanic are given below:

Table 2.6. Scoring scale of mechanics of a paragraph

Scoring Scale	Alternative Competence of Paragraph Content
5	Excellent to very good: demonstrative mastery of convention, little mistake in spelling, punctuation, capitalization
4	Good to average: occasionally error of spelling, punctuation, capitalization, but meaning not obscured
3	Fair to poor: frequent errors of spelling, punctuation, capitalization, and meaning not obscured
2	Very poor: no mastery of convention, dominated by errors of punctuation, capitalization, paragraphing, and writing not enough to evaluate.

2. Discovery Learning

a. Definition of Discovery Learning

One of the cognitive instructional model is discovery learning from Jerome Bruner. He regards that discovery learning agree with searching knowledge actively by human being, and automatically gives the best result.²² Jerome Bruner is a Psychologist from Harvard. He and his friend state that discovery learning is important, they state:

*Discovery learning, sebuah model pembelajaran yang menekankan pentingnya membantu siswa untuk memahami struktur atau ide-ide kunci suatu disiplin ilmu, kebutuhan akan keterlibatan aktif siswa dalam proses belajar, dan keyakinan bahwa pembelajaran sejati terjadi melalui personal discovery (penemuan pribadi).*²³

The writer adds that, the best result here should not force students to get the best mark in the end of teaching learning process. The students are given chance by the teacher to try solve the problem by themselves that they are facing. It means that learning output is independently. Discovery learning is a method that encourages students to arrive at a conclusion based upon their own activities and observations. Inclusion of activities based on discovery learning in science teaching in Turkey is important for meaningful and lifelong learning. The activities in science teaching raise the curiosity of students and drive them to inquire their priorities and perceive the natural phenomena from different aspects. Such activities help to correct the conceptual errors of students.²⁴

²² Trianto, *Model-Model Pembelajaran Inovatif Berorientasi Konstruktif*, (Jakarta: Prestasi pustaka, 2007), p. 26.

²³ Richard I. Arends, *Learning to Teach*, (Yogyakarta: Pustaka Belajar, 2008), p. 48.

Discovery learning model emphasize the important of structure comprehend or the important ideas to a science discipline, through involvement of students' activity in teaching learning process. Discovery learning model is a model to improve the way of the active students' learning by discovering and investigating themselves, so the result that will get is permanent and memorable in their mind, it is unforgettable to students. By using discovery learning, students can also think analysis and try to solve their problem by themselves.²⁵ When students were asked to write, they got stress and worried, because of the grammatical rule in English uses in writing. Here, the writer use discovery learning is to reduce students' worry about the grammatical rule. The students would write without any grammatical rule as usual at the first time, but they would face the fact thing that must be assumed to be a thing that must be written. People who use self discovery in learning turn out to be more self confident. Discovery is a way from the unknown to the known by the learners themselves. The active participation of the learner in the learning process is called discovery learning. In discovery learning, students construct knowledge based on new information and data collected by them in an explorative learning environment.²⁶

Discovery learning occurs whenever the learner is not provided with the target information or conceptual understanding and must find it independently and with only the provided materials. Within discovery learning methods, there is an opportunity to provide the learners with intensive, conversely, minimal guidance,

²⁴ Ali Gunay Balım, —The Effects of Discovery Learning on Students' Success and Inquiry Learning Skillll, (Eurasian Journal of Educational Research, 2009), p. 2-3.

²⁵ M. Hosnan, *Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21*, (Bogor: Ghalia Indonesia, 2014), p. 282.

²⁶ Ali Gunay Balım, —The Effects of Discovery Learning on Students' Success and Inquiry Learning Skillll, (Eurasian Journal of Educational Research, 2009), p. 2.

and both types can take many forms (e.g., manuals, simulations, feedback, example problems).²⁷ Discovery Learning can be called as an active learning, here, strategy for active learning has a purpose to make independent and creative growing in studying, so that students can make innovations. Learning aim is hope to make students enable to understand a concept through their discovery by doing experiment. For this, it only can be achieved by using strategy in grouping to make a report as well as communication.

Mallinson suggest that — If the main goal of science program is to get children to understand, remember, and apply science concept, there's probably no more powerful tool than having writing science. Research indicate that writing about science improves not only science vocabulary, but also performance in reading and thinking in the discipline.²⁸

b. Principle of Discovery Learning

The Discovery Learning Model integrates the following 5 principles:

1. Problem Solving

Instructors should guide and motivate learners to seek for solutions by combining existing and newly acquired information and simplifying knowledge. This way, learners are the driving force behind learning, take an active role and establish broader applications for skills through activities that encourage risks, problem-solving and probing.

²⁷ Louis Alfieri, et.all., —Does Discovery-Based Instruction Enhance Learning?, (City University of New York, 2011), Vol. 103, No. 1, 1–18, P.2.

²⁸ Trianto, *Model-Model Pembelajaran Inovatif Berorientasi Konstruktik*, (Jakarta: Prestasi Pustaka, 2007), p. 133-134.

2. Learner Management

Instructors should allow participants to work either alone or with others, and learn at their own pace. This flexibility makes learning the exact opposite of a static sequencing of lessons and activities, relieves learners from unnecessary stress, and makes them feel they own learning.

3. Integrating and Connecting.

Instructors should teach learners how to combine prior knowledge with new, and encourage them to connect to the real world. Familiar scenarios become the basis of new information, encouraging learners to extend what they know and invent something new.

4. Information Analysis and Interpretation

Discovery learning is process-oriented and not content-oriented, and is based on the assumption that learning is not a mere set of facts. Learners in fact learn to analyze and interpret the acquired information, rather than memorize the correct answer.

5. Failure and Feedback

Learning doesn't only occur when we find the right answers. It also occurs through failure. Discovery learning does not focus on finding the right end result, but the new things we discover in the process. And it's the instructor's responsibility to provide feedback, since without it learning is incomplete.

c. Design of Discovery Learning

Choose the ideal self-guided eLearning activities. To create a truly effective Discovery Learning online course, you must offer your learners self-guided eLearning activities that they can use to explore the subject matter autonomously. Ideally, these eLearning activities should offer small amounts of information spread out over time to reduce cognitive overload. For example, a brief eLearning scenario or serious game can give them the opportunity to absorb and retain the information, even if they may be distracted or short on time.

Keep learners on track. One of the major pitfalls of Discovery Learning is that learners have the potential to spiral out of control. This is particularly the case when learners don't have any guidance or structure. Thus, you should always be on hand, or enlist the aid of a moderator, in order to keep learners on track and offer any assistance along the way. If you notice that an individual is veering off the eLearning course and is unable to concentrate on the task, then you may need to intervene and provide them with additional support resources.

Be a guide, not a director. Discovery Learning is all about letting your learners explore and, as the name suggests, discover the solution on their own. Therefore, your role is not to direct or instruct them, but to point them in the right direction. You must give them the foundations on which they can build upon, then serve as a guide moving forward. This often requires that you step away from the eLearning activity and merely observe their progress. If you notice that they are struggling, then it may be time to offer a word, encouragement, or advice.

Give them time to explore and reflect. Nothing will be gained by rushing through a Discovery Learning online course. In fact, you must give your learners

plenty of time to fully explore the subject matter, arrive at their own conclusions, and then reflect on the process. Unlike traditional eLearning courses, Discovery Learning courses often require more time and motivation. This is due to the fact that learners do not have a facilitator walking them through every step of the process. Instead, they must set out on their own in search of the answers. Those who are not motivated or determined to succeed may need an extra push, possibly in the form of leaderboards or badges that they can earn as they progress.

Spark meaningful online discussions. After your learners have finished the eLearning activity or assessment, encourage them to discuss the process and the outcome with their peers. Create an online forum where they can get invaluable feedback, or schedule regular online group chats using video conferencing tools. The key is to get them talking about what they learned and how they learned it, so that they can fine tune their mental processes and learning behaviors. At this point, you can also identify which learners excelled on their own and which may need more assistance. You may even wish to pair them up with another peer who can serve as mentor.²⁹

There are many specific aims in discovery learning, as follow; students have a chance to involve actively in teaching learning. Students learn to discover rule in concrete as well as abstract situation, also students extrapolate information that have given. Students learn to formulate answer question strategy that not confused and use answer question to obtain information. Students form the way of working together effectively, giving information each other, and listening and

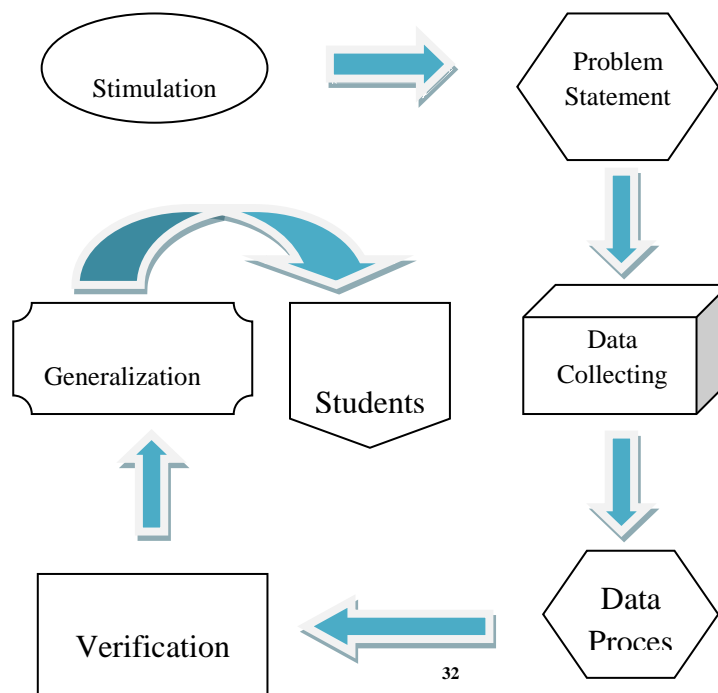
²⁹ Christopher Pappas, “Instructional Design Models and Theories: The Discovery Learning Model”, <https://elearningindustry.com/discovery-learning-model> (Accessed in September 4th at 10.16 AM)

using people's ideas. Students' concept skills and principles that have been learnt is meaner. Students' skill in discovery learning is easier to transfer in new activity and to apply in new learning situation.³⁰

The main characteristic of discovery learning are explore and solve the problem to create, merged, generalize knowledge, students-centered, the activity is merged new knowledge and knowledge that available.³¹

d. Procedure of Discovery Learning

In Discovery Learning, teacher should must give a change to students to be a problem solver, mathematician, and historian. Lesson material is not given in the beginning of teaching learning, but students should must do some activities collect information, comparing, category, analyzing, integrating, reorganizing material as well as making conclusions.



2.1 Procedure of Discovery Learning³²

³⁰ M. Hosnan, *Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21*, (Bogor: Ghalia Indonesia, 2014), p. 284.

³¹ Hosnan, p. 284.

1) Stimulation

First of all, in this stage students are hoped on thing which makes confusing, then it does not give generalization, in order there is desirability to investigate by themselves. Besides, teacher can begin the activity by proposing questions, read a book, etc. That will give direction on the starting of problem solving. The function of this stage is to supply learning interaction condition which can develop and help students in exploring material.

2) Problem statement

After that, teacher gives a chance to students to identify as many as possible the agendas of problem that related with the material, then one of them is chosen and arranged in form of hypothesis.

3) Data collection

When the exploring is going, teacher also gives a chance to students to collect the information as many as possible that related to prove whether hypothesis is right or no. The function of this stage is to answer the questions or to prove whether hypothesis is right or no, so that students are given a change to collect many relevant information, read literature, observe object, interview, and do experiment.

³² Gunay Balım, —The Effects of Discovery Learning on Students‘ Success and Inquiry Learning Skillll, (Eurasian Journal of Educational Research, 2009, p. 2.

4) Data Processing

According to Syah data processing is activity of process data and information that has been gotten from students through interviewing, observing, etc. Then interpreted. All of the information from the result of reading, interview, observation etc. All of them are processed, classified, tabulated, even if it needs, calculated with particular way as well as interpreted in believed level.

5) Verification

In this stage, all of students do investigate accurately to prove whether hypothesis is right or no that is decided with alternative discovery, direct coupled with data processing result. According to Bruner, verification has purpose in order learning process would run well and creative if teacher gave a change to students to discover a concept, theory, rule or comprehension through the example of their daily activity.

6) Generalization

Generalization is process of draw the conclusion that can be common principle and valid for all events or same problems, by attending verification result. Based on the verification result, so it is formulated principles of generalization.

Based on the explanation above about discovery learning, it can conclude that the learning process will be successful. If the teacher and the students can cooperate in the learning process. Therefore, if they cannot cooperate in the learning process and they will not be successful in the learning process.

e. Advantage and Disadvantage of Discovery Learning

The benefits of discovery learning are as follows;³³ students can participate actively in teaching learning, developing and planting inquiry in the students, supporting students' problem solving ability, giving interaction field in each-students and studentteacher, so that students can use language well, the material which is learnt can achieve the high level students' ability. It is also more unforgettable because the students are involved directly in the discovery process. Students learn how to learn, learning appreciate themselves, motivating themselves and it is easier to transfer, knowledge will be permanent and remember able, the result of discovery learning has more transfer effect than other result.

Developing students' intellectual activity and students' ability to think free, training students' cognitive to discover and solve the problem without people's helping. The shortage of discovery learning ; teacher feel fail to detect a problem and there is misunderstand between teacher and students, wasting the time, consuming teacher's work, it is not all students who be able to discover

3. Teacher-Centered Method

Teacher-centred teaching and lecture is the most common teaching behavior found in schools worldwide. Teacher-centred teaching can be very effective, particularly for sharing information that is not easily found else where, resending information in a quick manner, generating interest in the information, teaching learners who learn best by listening, however, teacher-centred teaching also presents several challenges, including; not all learners learn best by listening,

³³ Hosnan, p. 288-289.

keeping learners' interest is often difficult, the approach tends to require little or no critical thinking, the approach assumes that all learners learn in the same impersonal way.³⁴

B. Related Studies

Syafi'i explained that relevant research or known as related study is the requirement to observe some previous researches conducted by other researchers in which they are relevant to the research you are conducting. Besides, to avoid the plagiarism. It means to maintain the originality of the topic investigated and the topic is never investigated by any previous researchers³⁵. The relevant research can be seen as in the following; 1) the related studies of this research are conducted by Ringgi Candraning Prawerti (2014), a college student of English Department of Sebelas Maret University Surakarta entitled, "The Effectiveness of Using Discovery Learning Method in Teaching Writing Skill Viewed From The Students' Creativity".³⁶ This research was conducted by using experimental research method and it was conducted at the second semester of Senior High School 1 Durenan Trenggalek East Java. Ringgi drew some conclusions as follows; the students who are taught using Discovery Learning Method have better writing skill. there is an interaction between teaching methods and creativity in teaching writing, the students having high level of creativity have

³⁴@Intel Corporation, "Teach Programme", http://schoolnet.org.za/gettingstarted/01/M1_Act3_reading1.htm, accessed in September 4th at 08.56 PM

³⁵ M. Syafi'i et al. *From Paragraphs to a Research Report: A Writing of English for Academic Purposes*, (Pekanbaru: Lembaga Bimbingan Belajar Syaf Intensive, 2011), p. 122

³⁶ Ringgi Candraning Prawerti, *The Effectiveness of Using Discovery Learning Method in Teaching Writing Skill Viewed From The Students' Creativity at thesecondsemester of Senior High School 1 Durenan Trenggalek East Java*. (Graduated Thesis: Universitas Sebelas Maret Surakarta, 2014)

better writing skill than those having low level of creativity. 2) Laelatul Mukharomah (2015) has done the research on the title, “The Use of Discovery Learning Model to Improve The Students’ Descriptive Writing”.³⁷ This research was conducted by using a classroom action research with the conclusions as the following; the implementation of discovery learning model to improve student’s writing of descriptive text was done in three cycles. This research shows that the use of discovery learning model can improve students’ descriptive text writing.

C. Conceptual Framework

Based on theoritical above, the writer synthesize that writing is one of four basic skills that cannot be mastered as easy as speaking. Writing is not just combining some words or sentences, it has forms and rules that not equal with something we use in conversation. We need a lot of practices and have interesting methods in order to make the students accustome to learn English. One of those methods is the using discovery learning method in the teaching of descriptive text writing.

The writer assumes that discovery learning method can be adapted in teaching learning English, especially writing descriptive text. Discovery Learning is an effective writing tool for students, especially for those students who are suffering “writer’s block” or for students who are not talk active or introveted. The method is meant so students can generate or express their ideas in written form without feeling worry of the wrong grammatical, the students have members

³⁷ Laelatul Mukharomah, *The Use of Discovery Learning Model to Improve The Students’ Descriptive Writing at the first year of MTSn NU 08 Gemuh Kendal*. (Graduated Thesis: UIN WALISONGO Semarang, 2015)

in a group that it makes them are easy to make written text because they will get stimulus to generate or express their ideas when they read the writing of their members in a group and continue to generate the new one based on their ideas.

Discovery Learning provides more chances for the students to make them become active and creative learner, especially for writing. Besides, it is also expected that the use of the discovery learning in teaching-learning process can make the students comfortable to learn writing .

D. Hypothesis

Based on the problem statements that presented by the researcher, the research hypothesis is stated as follows:

- a. Hypothesis Positive (H_a): there is significant effect in writing descriptive text taught by applying Discovery Learning Method.
- b. Hypothesis Negative (H_o): there is no significant effect in writing descriptive text taught by applying Discovery Learning Method.

CHAPTER III

RESEARCH METHODOLOGY

A. Time and Place of the Study

This research would be conducted at SMK Al-Washliyah 3 Medan. It was located at Jl. Garu 2, No. 02, Medan Amplas, North Sumatera. The researcher chosed SMK AL-Washliyah 3 Medan as the location of the study because :

1. This school had been never taught by applying Discovery Learning Method.
2. The data which was needed in this research could be found in this school.
3. The number of students was sufficient to be a representative sample.
4. This school was the Islamic school. This was one of the requirement from my faculty to conduct the research in the Islamic school.

B. Population and Sample

1. Population

According to Arikuntoro says: "Population is set of collection all elements possessing one more attributes of interest."³⁸ The population of this research would be taken from second grade students of SMK Al-Washliyah 3 Medan at academic year 2017/2018 with the sampling frame consists of two classes. They were XI-Ak (22 students) and XI-Ap (24 students).

³⁸Suharsimi Arikunto,(2010), *Prosedur Penelitian Suatu Pendekatan Praktik*, Jakarta: PT. Rineka Cipta, p. 173

Table 3.1
Population of the Research

No	Classes	Population
1	XI-Ak	22
2	XI-Ap	24
Total		46

Source data: Interview result with english teacher of second grade of SMK Al-Washliyah 3 Medan. 17th of July 2018

2. Sample

Sample was a part of population which would be researched. Sample referred to part from the population in the research. Before taking the sample, the researcher needed to consider the following; the ability of researchers viewed from time, effort, and funds, narrow area of observation of each subject, because it involved a lot of little data, the size of the risk borne by researchers. For research at great risk, of course if large sample, the result would be better.

The writer would use formula applied to find out the sample of population as follows:

$$n = \frac{N}{1 + Ne^2}$$

Where:

n: number of samples

N: number of population

e: error tolerance³⁹

According to Arikunto if the populatin is under 100, all the population can be as sample. And if the population is over 100, the researcher can take 10%-15% or 20%-25% or more can be as sample. In this case 100% would be taken as the sample of this research. The researcher would take all students as the sample.⁴⁰ Class XI-Ap was decided as experimental group and class XI-Ak as control group. There were 46 students as the sample, 22 students for experimental group and 24 students for control group. The sample of this research also could be seen as follow:

Table 3.2
Sample of the Research

Group	Samples	
	Class	Students
Experimental	XI-Ap	24 Students
Control	XI-Ak	22 Students
Total		46 Students

³⁹ Sevilla, Consuelo G. *et. Al, Research Methods*. (Quezon City: Rex Printing Company, 2007), p. 182

⁴⁰ Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktek*. (Jakarta: PT. Rineka Cipta, 2006), p. 134

C. Research Method

This research would be conducted by applying quantitative experimental research. Emzir declares that in the experimental research, the researcher manipulated at least a variable, controls other relevant variable, and observes the effect toward one or more dependent variable. In addition, the researcher required time priority, consistency and magnitude of the relation.⁴¹ Thus, experimental research showed that a research would be investigated whether there was any effect treatment in participants' behaviours or their internal processes.

This research would be experimented by using treatment. This research would be conducted at SMK Al-Washliyah 03 Medan year 2017/2018. In conducting the experimental research, the sample would be divided in two groups, namely experimental group and control group. In this research, the experimental group was the group which would be taught by applying Discovery Learning Method, while the control group was a group which would be not taught by applying Discovery Learning Method.

D. Instrumentation of Collecting Data

The researcher must use instrument in order to get the better data. The instrument of the research was a tool or facility that was used by researcher for collecting the data in order to get better result. To make this research successful, the researcher used some instruments to collect data, they are follows:

⁴¹Emzir, *Metode Penelitian Pendidikan: Kuantitatif dan Kualitatif*. (Jakarta: Rajagrafindo Persada, 2010), p. 64

1. Test

A test, in simple term was a method of measuring a person's ability, knowledge, or performance in a given domain.⁴² The test was used to collect the students' writing that must be analyzed to identify students' achievement in writing descriptive text.

E. Technique of Collecting the Data

Technique of collecting data was the technique or methods that could be used by researcher for collecting the data. Data collection could be interpreted as reseach activities in order to gather a number of field data needed to answer the research or test hyphotesis. In this research it would be used pre-test, treatment, and post-test.

1. Pre-test

The pre-test would be conducted before treatment. The same pre-test was given to both experimental and control group in order to investigate the students writing ability. Both experimental and control group would be asked to write based on the text given.

2. Treatment

The treatment would be conducted after pre-test in experimental group. The students would be taught by applying Discovery Learning method and

⁴²H.Douglas Brown. 2004. *Language Assessment Principles and Classroom Practice*. p. 3

control group which would be taught by Teacher-Centered method. Both experimental and control group were taught by the same material.

3. Post-Test

The post-test was used writing test. It would give after the treatment finish. The objective of this was to get the data about the result of treatment to be analyzed in order to know the effect on the students' ability in writing descriptive text at SMK AL WASHLIYAH 3 MEDAN.

F. Technique of Analyzing the Data

In order to find the different effect between experimental and control group, the t-test formula was applied. The formula was stated as the following:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Where:

t = t Count

\bar{x}_1 = Average value of sample group owning highest score

\bar{x}_2 = Average value of sample group owning lowest group

s = Standard deviation merger

n_1 = The total of samples in Experimental Group

n_2 = The total of samples in Control Group

In this research the data obtained from the experiment and control class. To significantly whether there was effect of Discovery Method on the students' ability in writing descriptive text, the researcher should do the requirement test at the first by using normality and homogeneity test.

1. Normality of Test

Normality test used to determine if a data set was well-method by a normal distribution and to compare how likely it was random variable underlying the data to be normally distribution. The normality test of variable X used Lilifors test:

- Perception x_1, x_2, \dots, x_n , made permanent number z_1, z_2, \dots, z_n , by formula:

$$z_i = \frac{x_i - \bar{x}}{s}$$

Where: x = Score of student

\bar{x} = Mean Score

S = Standard Deviation

To every this permanent number and by using enlist of permanent normal distribution, and then calculated the opportunity $F(z_1) = P(z \leq z_1)$. Here in after calculated a proportion $z_1, z_2, \dots, \dots, z_n$ the smaller was equal to z_i . Counted the difference $F(z_i) - S(z_i)$ and then determined the absolute price. Take the higher value among the difference absolutes values; said that the value was 1..if $Lo < Lt$, which was got from critical value of the lilifors test at real level $\alpha = 0,05$ the data distribution was normal.

2. Homogeneity of Test

For testing both of variants homogeneity, used equality test of two variants, that is:

$$F = \frac{\text{highest variants}}{\text{smallest variants}}$$

Furthermore, comparing with $F_{\text{variants}} = \text{Identically}$, if $F_{\text{var}} < F_{\text{tab}}$, both of sample are homogeneity⁴³

After the writer found out whether both groups have normal distribution and homogeneity. The writer would be used validity test to find out the instrument valid or not, and reability test to consistency and accurary in scoring.

3. Hypothesis of Test

The hypothesis to be tested in the form:

$$H_o : \mu x = \mu y$$

$$H_a: \mu x = \mu y$$

Where :

H_o = Null Hypothesis

H_a = Alternative Hypothesis

μx = The mean score of the students' teach by using Discovery Learning Method

μy = The mean score of the student's teach by using conventional method

⁴³Sudjana, *Metode Statistik*, (Bandung :Tarsito,1996), p. 250

CHAPTER IV

DATA ANALYSIS AND RESEARCH FINDING

A. Description of the Data

To collect the data of this research, the writer observed the second grade of SMK Al Washliyah 3 Medan. There were two classes, namely XI-Akuntansi (Ak) and XI-Administrasi Perkantoran (Ap). For the XI-Ak, the writer used Teacher-Centered method and for the XI-Ap, writer used Discovery Learning Method. Then writer gave pre test to get the data before using the method. After the writer used the method in the class, the writer gave post test to students to get the data about the effect of applying Discovery Learning method in writing descriptive text. After getting the data, the writer analyzed each of the data. The data of the students' scores drawn as follow:

Table 4.1

The Students' Score in Experimental Group

No.	Students' Initial	Pre Test	Post Test
1	AP	69	78
2	ARR	65	72
3	ASW	53	65
4	CS	62	70
5	DY	53	67
6	DNC	59	63
7	DA	59	65
8	EA	63	72

9	FDY	71	78
10	FF	50	62
11	NSS	50	62
12	NS	71	78
13	NH	75	80
14	NUS	80	90
15	PS	80	90
16	RP	40	55
17	SM	75	83
18	SD	79	84
19	SST	61	68
20	SFN	66	74
21	SR	65	73
22	TA	53	67
23	UK	80	90
24	VRS	75	84
	Total	1554	1770
	Mean	64.75	73.75

From the table above, the students' writing ability was taught by applying Discovery Learning method showed the minimum score of pre test was 40, the maximum score pre test was 80 and the mean of pre test was 64.75. On the other hand the minimum score of post test was 55, the maximum score of post test was 90, the mean of pre test was 73.75.

Table 4.2
The Students' Score in Control Group

No.	Students' Initial	Pre Test	Post Test
1	AK	62	65
2	DNP	58	62
3	EW	52	60
4	ES	69	74
5	FA	60	65
6	HF	74	76
7	IR	75	78
8	JAH	66	70
9	KS	58	61
10	NP	48	53
11	NAP	42	53
12	NS	45	52
13	RA	70	76
14	RAS	53	64
15	SL	53	60
16	AO	53	58
17	SH	48	52
18	TAW	70	72
19	WAA	37	45
20	YP	38	42
21	YMSS	75	78

22	ZA	62	68
	Total	1268	1384
	Mean	57.63	62.90

From the table above, the students' writing ability was taught without applying Discovery Learning method showed the minimum score of pre test was 37, the maximum score pre test was 75 and the mean of pre test was 57.63. On the other hand the minimum score of post test was 42, the maximum score of post test was 78, the mean of pre test was 62.90.

B. Calculation of Normality Test

1. Normality Testing of Experimental Group

Table 4.3

Frequency Distribution of Pre Test in Experimental Group

No	Xi	Fi	Fi.Xi	Xi ²	Fi.Xi ²
1	40	1	40	1600	1600
2	50	2	100	2500	5000
3	53	3	159	2809	8427
4	59	2	118	3481	6962
5	61	1	61	3721	3721
6	62	1	62	3844	3844
7	63	1	63	3969	3969
8	65	2	130	4225	8450
9	66	1	66	4356	4356
10	69	1	69	4761	4761
11	71	2	142	5041	10082
12	75	3	225	5625	16875

13	79	1	79	6241	6241
14	80	3	240	6400	19200
Total	893	24	1554	58573	103488

Based on the data above, the result of $\sum F_i X_i^2$ was 103488 and $\sum F_i X_i$ was 1554. Then the following was the calculation of mean, variant and standart deviation .

a. Mean

$$x = \frac{\sum F_i X_i}{\sum F_i}$$

Where:

x = mean of variabel

$\sum F_i X_i$ = total number of score

$\sum F_i$ =number of sample

So,

$$x = \frac{\sum F_i X_i}{\sum F_i}$$

$$x = \frac{1554}{24}$$

$$x = 64.75$$

b. Variant

Where :

S^2 = Variant

n = number of sample

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

$$\begin{aligned}
&= \frac{24 \times 103488 - (1554)^2}{24(24 - 1)} \\
&= \frac{2.483.712 - 2.414.916}{24(23)} \\
&= \frac{68.796}{552} \\
&= 124.63
\end{aligned}$$

c. Standard Deviation

$$\begin{aligned}
S &= \sqrt{s^2} \\
&= \sqrt{124,63} \\
&= 11.16
\end{aligned}$$

After getting the calculation of mean, variant and deviation standart, the text step was to found the normality of the test. It means that the test was given to the students was observed by Liliefors test. The calculation of normality writing can be seen in the following table :

Table 4.4

Normality Testing of Pre Test in Experimental Group

No	Score	Zi	F(Zi)	S(Zi)	F(Zi)-S(Zi)
1	40	-2.21	0.013552581	0.04	-0.026447419
2	50	-1.32	0.093417509	0.12	-0.026582491
3	50	-1.32	0.093417509	0.12	-0.026582491
4	53	-1.05	0.146859056	0.25	-0.103140944
5	53	-1.05	0.146859056	0.25	-0.103140944
6	53	-1.05	0.146859056	0.25	-0.103140944
7	59	-0.51	0.305025731	0.33	-0.024974269
8	59	-0.51	0.305025731	0.33	-0.024974269
9	61	-0.33	0.370699981	0.37	0.000699981
10	62	-0.24	0.405165128	0.41	-0.004834872

11	63	-0.15	0.440382308	0.45	-0.009617692
12	65	0.02	0.507978314	0.54	-0.032021686
13	65	0.02	0.507978314	0.54	-0.032021686
14	66	0.11	0.543795313	0.58	-0.036204687
15	69	0.38	0.648027292	0.62	0.028027292
16	71	0.56	0.712260281	0.70	0.012260281
17	71	0.56	0.712260281	0.70	0.012260281
18	75	0.91	0.818588745	0.83	-0.011411255
19	75	0.91	0.818588745	0.83	-0.011411255
20	75	0.91	0.818588745	0.83	-0.011411255
21	79	1.27	0.897957685	0.87	0.027957685
22	80	1.36	0.913085038	1	-0.086914962
23	80	1.36	0.913085038	1	-0.086914962
24	80	1.36	0.913085038	1	-0.086914962
Total	1554	Lo = 0.028			
Mean	64.75	Lt = 0.173			

a. Finding Z Score

$$\text{Formula: } Z_i = \frac{x_i - x}{s}$$

Where ;

x_i = value

x = mean

S = standard deviation

$$Z_{i1} = \frac{40 - 64.75}{11.16} = -2.21$$

$$Z_{i2} = \frac{50 - 64.75}{11.16} = -1.32$$

$$Z_{i3} = \frac{53 - 64.75}{11.16} = -1.05$$

$$Zi\ 4 = \frac{59 - 64.75}{11.16} = -0.51$$

$$Zi\ 5 = \frac{61 - 64.75}{11.16} = -0.33$$

$$Zi\ 6 = \frac{62 - 64.75}{11.16} = -0.24$$

$$Zi\ 7 = \frac{63 - 64.75}{11.16} = -0.15$$

$$Zi\ 8 = \frac{65 - 64.75}{11.16} = 0.02$$

$$Zi\ 9 = \frac{66 - 64.75}{11.16} = 0.11$$

$$Zi\ 10 = \frac{69 - 64.75}{11.16} = 0.38$$

$$Zi\ 11 = \frac{71 - 64.75}{11.16} = 0.56$$

$$Zi\ 12 = \frac{75 - 64.75}{11.16} = 0.91$$

$$Zi\ 13 = \frac{79 - 64.75}{11.16} = 1.27$$

$$Zi\ 14 = \frac{80 - 64.75}{11.16} = 1.36$$

b. Finding $S(Z_i)$

$$S(Z_i) = \frac{F_{kum}}{N}$$

$$S(Z_i) = \frac{1}{24} = 0.04$$

$$S(Z_i) = \frac{3}{24} = 0.12$$

$$S(Z_i) = \frac{6}{24} = 0.25$$

$$S(Z_i) = \frac{8}{24} = 0.33$$

$$S(Z_i) = \frac{9}{24} = 0.37$$

$$S(Z_i) = \frac{10}{24} = 0.41$$

$$S(Z_i) = \frac{11}{24} = 0.45$$

$$S(Z_i) = \frac{13}{24} = 0.54$$

$$S(Z_i) = \frac{14}{24} = 0.58$$

$$S(Z_i) = \frac{15}{24} = 0.62$$

$$S(Z_i) = \frac{17}{24} = 0.70$$

$$S(Z_i) = \frac{20}{24} = 0.83$$

$$S(Z_i) = \frac{21}{24} = 0.87$$

$$S(Z_i) = \frac{24}{24} = 1$$

From the table above it could be seen that Liliefors observation or $Lo = 0.028$ with $n = 24$ and real level $\alpha = 0.05$ from the list of critical value of Liliefors table $Lt = 0.173$. It was known that the coefficient of $Lo (0.028) < Lt (0.173)$. So, it could be concluded that the data distribution of the student's achievement in writing was **normal**.

Table 4.5
Frequency of Distribution Post Test in Experimental Group

No	Xi	Fi	Fi.Xi	Xi ²	Fi.Xi ²
1	55	1	55	3025	3025
2	62	2	124	3844	7688
3	63	1	63	3969	3969
4	65	2	130	4225	8450
5	67	2	134	4489	8978
6	68	1	68	4624	4624
7	70	1	70	4900	4900
8	72	2	144	5184	10368
9	73	1	73	5329	5329
10	74	1	74	5476	5476
11	78	3	234	6084	18252
12	80	1	80	6400	6400
13	83	1	83	6889	6889
14	84	2	168	7056	14112
15	90	3	270	8100	24300
Total	1084	24	1770	79594	132760

Based on the data above, the result of $Fi.Xi^2$ was 132760 and $FiXi$ was 1770.

Then the following was the calculation of mean, variant and standard deviation .

a. Mean

$$x = \frac{\sum FiXi}{\sum Fi}$$

Where:

x = mean of variabel

$\sum FiXi$ = total number of score

$\sum Fi$ = number of sample

So,

$$x = \frac{\sum FiXi}{\sum Fi}$$

$$x = \frac{1770}{24}$$

$$x = 73.75$$

b. Variant

Where :

S^2 = Variant

n = number of sample

$$\begin{aligned} S^2 &= \frac{n \cdot \sum fixi^2 - (\sum fixi)^2}{n(n-1)} \\ &= \frac{24 \cdot 132760 - (1770)^2}{24(24-1)} \\ &= \frac{3186240 - 3132900}{24(23)} \\ &= \frac{53340}{552} \\ &= 96.63 \end{aligned}$$

c. Standard Deviation

$$\begin{aligned}
 S &= \sqrt{s^2} \\
 &= \sqrt{96.63} \\
 &= 9.83
 \end{aligned}$$

After getting the calculation of mean, variant and deviation standart, the text step was to found the normality of the test. It means that there was given to the students was observed by Liliefors test. The calculation of normality writing could be seen in the following table :

Table 4.6
Normality Testing of Post Test in Experimental Group

No	Score	Zi	F(Zi)	S(Zi)	F(Zi)-S(Zi)
1	55	-1.90	0.02871656	0.04	-0.01128344
2	62	-1.19	0.117023196	0.12	-0.002976804
3	62	-1.19	0.117023196	0.12	-0.002976804
4	63	-1.09	0.137856572	0.16	-0.022143428
5	65	-0.89	0.186732943	0.25	-0.063267057
6	65	-0.89	0.186732943	0.25	-0.063267057
7	67	-0.68	0.24825223	0.33	-0.08174777
8	67	-0.68	0.24825223	0.33	-0.08174777
9	68	-0.58	0.280957309	0.37	-0.089042691
10	70	-0.38	0.351972708	0.41	-0.058027292
11	72	-0.17	0.432505068	0.5	-0.067494932
12	72	-0.17	0.432505068	0.5	-0.067494932
13	73	-0.07	0.47209683	0.54	-0.06790317
14	74	0.02	0.507978314	0.58	-0.072021686
15	78	0.43	0.666402179	0.70	-0.033597821
16	78	0.43	0.666402179	0.70	-0.033597821
17	78	0.43	0.666402179	0.70	-0.033597821
18	80	0.63	0.735652708	0.75	-0.014347292
19	83	0.94	0.82639122	0.79	0.03639122
20	84	1.04	0.85083005	0.87	-0.01916995

21	84	1.04	0.85083005	0.87	-0.01916995
22	90	1.65	0.950528532	1	-0.049471468
23	90	1.65	0.950528532	1	-0.049471468
24	90	1.65	0.950528532	1	-0.049471468
Total	1770	Lo = 0.036			
Mean	73.75	Lt = 0.173			

a. Finding Z Score

$$Z_i = \frac{x_i - \bar{x}}{s}$$

Where ;

x_i = value

\bar{x} = mean

s = standard deviation

$$Z_i 1 = \frac{55 - 73.75}{9.83} = -1.90$$

$$Z_i 2 = \frac{62 - 73.75}{9.83} = -1.19$$

$$Z_i 3 = \frac{63 - 73.75}{9.83} = -1.09$$

$$Z_i 4 = \frac{65 - 73.75}{9.83} = -0.89$$

$$Z_i 5 = \frac{67 - 73.75}{9.83} = -0.68$$

$$Z_i 6 = \frac{68 - 73.75}{9.83} = -0.58$$

$$Z_i 7 = \frac{70 - 73.75}{9.83} = -0.38$$

$$Z_i 8 = \frac{72 - 73.75}{9.83} = -0.17$$

$$Z_i 9 = \frac{73 - 73.75}{9.83} = -0.07$$

$$Zi\ 10 = \frac{74 - 73.75}{9.83} = 0.02$$

$$Zi\ 11 = \frac{78 - 73.75}{9.83} = 0.43$$

$$Zi\ 12 = \frac{80 - 73.75}{9.83} = 0.63$$

$$Zi\ 13 = \frac{83 - 73.75}{9.83} = 0.94$$

$$Zi\ 14 = \frac{84 - 73.75}{9.83} = 1.04$$

$$Zi\ 15 = \frac{90 - 73.75}{9.83} = 1.65$$

b. Finding S(Zi)

$$S(Zi) = \frac{Fkum}{N}$$

$$S(Zi) = \frac{1}{24} = 0.04$$

$$S(Zi) = \frac{3}{24} = 0.12$$

$$S(Zi) = \frac{4}{24} = 0.16$$

$$S(Zi) = \frac{6}{24} = 0.25$$

$$S(Zi) = \frac{8}{24} = 0.33$$

$$S(Zi) = \frac{9}{24} = 0.37$$

$$S(Zi) = \frac{10}{24} = 0.41$$

$$S(Zi) = \frac{12}{24} = 0.5$$

$$S(Zi) = \frac{13}{24} = 0.54$$

$$S(Zi) = \frac{14}{24} = 0.58$$

$$S(Zi) = \frac{17}{24} = 0.70$$

$$S(Z_i) = \frac{18}{24} = 0.75$$

$$S(Z_i) = \frac{19}{24} = 0.79$$

$$S(Z_i) = \frac{21}{24} = 0.87$$

$$S(Z_i) = \frac{24}{24} = 1$$

From the table above it could be seen that Liliefors observationor $Lo = 0.036$ with $n = 24$ and real level $\alpha = 0.05$ from the list of critical value of Liliefors table $Lt = 0.161$. It was known that the coefficient of $Lo (0.036) < Lt (0.161)$. So, it could be concluded that the data distribution of the student's ability in writing was **normal**.

2. Normality Testing of Control Group

Tabel 4.7

Frequency Distribution of Pre Test in Control Group

No	Xi	Fi	Fi.Xi	Xi ²	Fi.Xi ²
1	37	1	37	1369	1369
2	38	1	38	1444	1444
3	42	1	42	1764	1764
4	45	1	45	2025	2025
5	48	2	96	2304	4608
6	52	1	52	2704	2704
7	53	3	159	2809	8427
8	58	2	116	3364	6728
9	60	1	60	3600	3600
10	62	2	124	3844	7688
11	66	1	66	4356	4356
12	69	1	69	4761	4761

13	70	2	140	4900	9800
14	74	1	74	5476	5476
15	75	2	150	5625	11250
Total	849	22	1268	50345	76000

Based on the data above, the result of $\sum F_i X_i^2$ was 76000 and $\sum F_i X_i$ was 1268.

Then the following was the calculation of mean, variant and standart deviation.

a. Mean

$$x = \frac{\sum F_i X_i}{\sum F_i}$$

Where:

x = mean of variabel

$\sum F_i X_i$ = total number of score

$\sum F_i$ = number of sample

So,

$$x = \frac{\sum F_i X_i}{\sum F_i}$$

$$x = \frac{1268}{22}$$

$$x = 57.63$$

b. Variant

Where :

S^2 = Variant

n = number of sample

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

$$= \frac{22 \times 76000 - (1268)^2}{22(22 - 1)}$$

$$= \frac{1672000 - 1607824}{22(21)}$$

$$= \frac{64176}{462}$$

$$= 138.90$$

c. Standard Deviation

$$S = \sqrt{s^2}$$

$$= \sqrt{138.90}$$

$$= 11.78$$

After getting the calculation of mean, variant and deviation standart, the next step was to found the normality of the test. It means that the test was given to the students was observed by Liliefors test. The calculation of normality writing can be seen in the following table :

Table 4.8
Normality Testing of Pre Test in Control Group

No	Score	Zi	F(Zi)	S(Zi)	F(Zi)-S(Zi)
1	37	-1.75	0.040059157	0.04	0.00005915
2	38	-1.66	0.048457226	0.09	-0.041542774
3	42	-1.32	0.093417509	0.13	-0.036582491
4	45	-1.07	0.142309654	0.18	-0.037690346
5	48	-0.81	0.208970088	0.27	-0.061029912
6	48	-0.81	0.208970088	0.27	-0.061029912
7	52	-0.47	0.319177509	0.31	0.009177509
8	53	-0.39	0.348268273	0.45	-0.101731727

9	53	-0.39	0.348268273	0.45	-0.101731727
10	53	-0.39	0.348268273	0.45	-0.101731727
11	58	0.03	0.511966473	0.54	-0.028033527
12	58	0.03	0.511966473	0.54	-0.028033527
13	60	0.20	0.579259709	0.59	-0.010740291
14	62	0.37	0.644308755	0.68	-0.035691245
15	62	0.37	0.644308755	0.68	-0.035691245
16	66	0.71	0.761147932	0.72	0.041147932
17	69	0.96	0.831472393	0.77	0.061472393
18	70	1.05	0.853140944	0.86	-0.006859056
19	70	1.05	0.853140944	0.86	-0.006859056
20	74	1.38	0.916206678	0.90	0.016206678
21	75	1.47	0.929219123	1	-0.070780877
22	75	1.47	0.929219123	1	-0.070780877
Total	1268	Lo = 0.061			
Mean	57.636364	Lt = 0.190			

a. Finding Z Score

Formula: $Z_i = \frac{x_i - \bar{x}}{s}$

Where ;

x_i = value

\bar{x} = mean

s = standard deviation

$$Z_{i1} = \frac{37 - 57.63}{11.78} = -1.75$$

$$Z_{i2} = \frac{38 - 57.63}{11.78} = -1.66$$

$$Z_{i3} = \frac{42 - 57.63}{11.78} = -1.32$$

$$Z_{i4} = \frac{45 - 57.63}{11.78} = -1.07$$

$$Zi\ 5 = \frac{48 - 57.63}{11.78} = -0.81$$

$$Zi\ 6 = \frac{52 - 57.63}{11.78} = -0.47$$

$$Zi\ 7 = \frac{53 - 57.63}{11.78} = -0.39$$

$$Zi\ 8 = \frac{58 - 57.63}{11.78} = 0.03$$

$$Zi\ 9 = \frac{60 - 57.63}{11.78} = 0.20$$

$$Zi\ 10 = \frac{62 - 57.63}{11.78} = 0.37$$

$$Zi\ 11 = \frac{66 - 57.63}{11.78} = 0.71$$

$$Zi\ 12 = \frac{69 - 57.63}{11.78} = 0.96$$

$$Zi\ 13 = \frac{70 - 57.63}{11.78} = 1.05$$

$$Zi\ 14 = \frac{74 - 57.63}{11.78} = 1.38$$

$$Zi\ 15 = \frac{75 - 57.63}{11.78} = 1.47$$

b. Finding S(Zi)

$$S(Zi) = \frac{Fkum}{N}$$

$$S(Zi) = \frac{1}{22} = 0.04$$

$$S(Zi) = \frac{2}{22} = 0.09$$

$$S(Zi) = \frac{3}{22} = 0.13$$

$$S(Zi) = \frac{4}{22} = 0.18$$

$$\begin{aligned}
S(Z_i) &= \frac{6}{22} = 0.27 \\
S(Z_i) &= \frac{7}{22} = 0.31 \\
S(Z_i) &= \frac{10}{22} = 0.45 \\
S(Z_i) &= \frac{12}{22} = 0.54 \\
S(Z_i) &= \frac{13}{22} = 0.59 \\
S(Z_i) &= \frac{15}{22} = 0.68 \\
S(Z_i) &= \frac{16}{22} = 0.72 \\
S(Z_i) &= \frac{17}{22} = 0.77 \\
S(Z_i) &= \frac{19}{22} = 0.86 \\
S(Z_i) &= \frac{20}{22} = 0.90 \\
S(Z_i) &= \frac{22}{22} = 1
\end{aligned}$$

From the table above it could be seen that Liliefors observation or $L_o = 0.061$ with $n = 22$ and real level $\alpha = 0.05$ from the list of critical value of Liliefors table $L_t = 0.190$. It was known that the coefficient of L_o (0.061) $< L_t$ (0.190). So, it could be concluded that the data distribution of the student's ability in writing was **normal**.

Tabel 4.9

Frequency Distribution of Post Test in Control Group

No	X_i	F_i	$F_i.X_i$	X_i^2	$F_i.X_i^2$
1	42	1	42	1764	1764
2	45	1	45	2025	2025
3	52	2	104	2704	5408
4	53	2	106	2809	5618
5	58	1	58	3364	3364

6	60	2	120	3600	7200
7	61	1	61	3721	3721
8	62	1	62	3844	3844
9	64	1	64	4096	4096
10	65	2	130	4225	8450
11	68	1	68	4624	4624
12	70	1	70	4900	4900
13	72	1	72	5184	5184
14	74	1	74	5476	5476
15	76	2	152	5776	11552
16	78	2	156	6084	12168
Total	1000	22	1384	64196	89394

Based on the data above, the result of $\sum F_i X_i^2$ was 112775 and $\sum F_i X_i$ was 1765. Then the following was the calculation of mean, variant and standard deviation .

a. Mean

$$x = \frac{\sum F_i X_i}{\sum F_i}$$

Where:

x = mean of variabel

$\sum F_i X_i$ = total number of score

$\sum F_i$ =number of sample

So,

$$x = \frac{\sum F_i X_i}{\sum F_i}$$

$$x = \frac{1384}{22}$$

$$x = 62.90$$

b. Variant

Where :

$$S^2 = \text{Variant}$$

n = number of sample

$$\begin{aligned} S^2 &= \frac{n \cdot \sum fxi^2 - (\sum fxi)^2}{n(n-1)} \\ &= \frac{22 \times 89394 - (1384)^2}{22(22-1)} \\ &= \frac{1966668 - 1915456}{22(21)} \\ &= \frac{51212}{462} \\ &= 110.84 \end{aligned}$$

c. Standard Deviation

$$\begin{aligned} S &= \sqrt{S^2} \\ &= \sqrt{110.84} \\ &= 10.52 \end{aligned}$$

After getting the calculation of mean, variant and deviation standard, the next step was to find the normality of the test. It means that the test was given to the students was observed by Liliefors test. The calculation of normality writing speaking could be seen in the following table :

Table 4.10
Normality Testing of Post Test in Control Group

No	Score	Zi	F(Zi)	S(Zi)	F(Zi)-S(Zi)
1	42	-1.98	0.023851764	0.04	-0.016148236
2	45	-1.70	0.044565463	0.09	-0.045434537
3	52	-1.03	0.151505003	0.18	-0.028494997
4	52	-1.03	0.151505003	0.18	-0.028494997
5	53	-0.94	0.17360878	0.27	-0.09639122
6	53	-0.94	0.17360878	0.27	-0.09639122
7	58	-0.46	0.32275811	0.31	0.01275811
8	60	-0.27	0.393580127	0.4	-0.006419873
9	60	-0.27	0.393580127	0.4	-0.006419873
10	61	-0.18	0.428576284	0.45	-0.021423716
11	62	-0.08	0.468118628	0.5	-0.031881372
12	64	0.10	0.539827837	0.54	-0.000172163
13	65	0.19	0.575345435	0.63	-0.054654565
14	65	0.19	0.575345435	0.63	-0.054654565
15	68	0.48	0.684386303	0.68	0.004386303
16	70	0.67	0.748571105	0.72	0.028571105
17	72	0.86	0.805105479	0.77	0.035105479
18	74	1.05	0.853140944	0.81	0.043140944
19	76	1.24	0.892512303	0.90	-0.007487697
20	76	1.24	0.892512303	0.90	-0.007487697
21	78	1.43	0.92364149	1	-0.07635851
22	78	1.43	0.92364149	1	-0.07635851
Total	1384	Lo = 0.043			
Mean	62.9091	Lt = 0.190			

a. Finding Z Score

Formula: $Z_i = \frac{x_i - x}{s}$

Where ;

x_i = value

x = mean

S = standard deviation

$$Z_{i\ 1} = \frac{42 - 62.90}{10.52} = -1.98$$

$$Z_{i\ 2} = \frac{45 - 62.90}{10.52} = -1.70$$

$$Z_{i\ 3} = \frac{52 - 62.90}{10.52} = -1.03$$

$$Z_{i\ 4} = \frac{53 - 62.90}{10.52} = -0.94$$

$$Z_{i\ 5} = \frac{58 - 62.90}{10.52} = -0.46$$

$$Z_{i\ 6} = \frac{60 - 62.90}{10.52} = -0.27$$

$$Z_{i\ 7} = \frac{61 - 62.90}{10.52} = -0.18$$

$$Z_{i\ 8} = \frac{62 - 62.90}{10.52} = -0.08$$

$$Z_{i\ 9} = \frac{64 - 62.90}{10.52} = 0.10$$

$$Z_{i\ 10} = \frac{65 - 62.90}{10.52} = 0.19$$

$$Z_{i\ 11} = \frac{68 - 62.90}{10.52} = 0.48$$

$$Z_{i\ 12} = \frac{70 - 62.90}{10.52} = 0.67$$

$$Z_{i\ 13} = \frac{72 - 62.90}{10.52} = 0.86$$

$$Z_{i\ 14} = \frac{74 - 62.90}{10.52} = 1.05$$

$$Z_{i\ 15} = \frac{76 - 62.90}{10.52} = 1.24$$

$$Z_{i\ 16} = \frac{78 - 62.90}{10.52} = 1.43$$

b. Finding $S(Z_i)$

$$S(Z_i) = \frac{F_{kum}}{N}$$

$$S(Z_i) = \frac{1}{22} = 0.04$$

$$S(Z_i) = \frac{2}{22} = 0.09$$

$$S(Z_i) = \frac{4}{22} = 0.18$$

$$S(Z_i) = \frac{6}{22} = 0.27$$

$$S(Z_i) = \frac{7}{22} = 0.31$$

$$S(Z_i) = \frac{9}{22} = 0.40$$

$$S(Z_i) = \frac{10}{22} = 0.45$$

$$S(Z_i) = \frac{11}{22} = 0.5$$

$$S(Z_i) = \frac{12}{22} = 0.54$$

$$S(Z_i) = \frac{14}{22} = 0.63$$

$$S(Z_i) = \frac{15}{22} = 0.68$$

$$S(Z_i) = \frac{16}{22} = 0.72$$

$$S(Z_i) = \frac{17}{22} = 0.77$$

$$S(Z_i) = \frac{18}{22} = 0.81$$

$$S(Z_i) = \frac{20}{22} = 0.90$$

$$S(Z_i) = \frac{22}{22} = 1$$

From the table above it could be seen that Liliefors observation or $Lo = 0.043$ with $n = 22$ and real level $\alpha = 0.05$ from the list of critical value of Liliefors table $Lt = 0.190$. It was known that the coefficient of $Lo (0.043) < Lt$

(0.190). So, it could be concluded that the data distribution of the student's achievement in writing was **normal**.

C. Calculation of Homogeneity Test

1. Homogeneity Testing of Pre test

$$F_{\text{obs}} \frac{S_1^2}{S_2^2}$$

Where: S_1^2 = the biggest variant

S_2^2 = the smallest variant

Based on the variants of both samples of pre-test found that :

$$S^2_{\text{ex}} = 124.63 \quad N = 24$$

$$S^2_{\text{co}} = 138.90 \quad N = 22$$

So,

$$F_{\text{obs}} = \frac{S^2_{\text{ex}}}{S^2_{\text{co}}}$$

$$= \frac{124.63}{138.90}$$

$$= 0.89$$

Then the coefficient of $F_{\text{obs}} = 0.89$ was compared with F_{table} where F_{table} was determined at real level $\alpha = 0.05$ and the same numerator $dk = N - 1 = 24 - 1 = 23$ that was exist dk numerator 21 the denominator $dk = n - 1$ ($22 - 1 = 21$). Then F_{table} could be calculated $F_{0.05(21,23)} = 2.036$

So $F_{\text{obs}} < F_{\text{table}}$ atau ($0.89 < 2.036$) so it could be concluded that the variant was homogenous.

2. Homogeneity Testing of Post test

$$F_{\text{obs}} \frac{S_1^2}{S_2^2}$$

Where: S_1^2 = the biggest variant

S_2^2 = the smallest variant

Based on the variants of both samples of pre-test found that :

$$S^2_{\text{ex}} = 96.63 \quad N = 24$$

$$S^2_{\text{co}} = 110.84 \quad N = 22$$

So,

$$\begin{aligned} F_{\text{obs}} &= \frac{S^2_{\text{ex}}}{S^2_{\text{co}}} \\ &= \frac{96.63}{110.84} \\ &= 0.87 \end{aligned}$$

Then the coefficient of $F_{\text{obs}} = 0.87$ was compared with F_{table} where F_{table} was determined at real level $\alpha = 0.05$ and the same numerator dk $= N - 1 = 22 - 1 = 21$ that was exist dk numerator 21 the denominator dk $= n - 1$ ($24 - 1 = 23$). Then F_{table} could be calculated $F_{0.05(21,23)} = 2.036$.

So $F_{\text{obs}} < F_{\text{table}}$ atau ($0.87 < 2.036$) so it could be concluded that the variant was homogenous.

D. Data Analysis

1. Analyzing the Data by Using T-Test Formula

The result of calculation from t-test was made to found the effect of Discovery Learning method.

Table 4.11
Mean of Post-Test -Pre Test in Experimental Group

No.	Score Post Test	Score Pre Test	Decrease
1	78	69	9
2	72	65	7
3	65	53	12
4	70	62	8
5	67	53	14
6	63	59	4
7	65	59	6
8	72	63	9
9	78	71	7
10	62	50	12
11	62	50	12
12	78	71	7
13	80	75	5
14	90	80	10
15	90	80	10
16	55	40	15
17	83	75	8
18	84	79	5
19	68	61	7
20	74	66	8
21	73	65	8
22	67	53	14
23	90	80	10
24	84	75	9
Σ			216

Mean	9
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From the calculation above, the total of decrease from the pre test and post test in experimental group was 216. Meanwhile the mean of pre test and post test in experimental group was 9.

Table 4.12

Mean of Post-Test -Pre Test in Control Group

No.	Score Post Test	Score Pre Test	Decrease
1	65	62	3
2	62	58	4
3	60	52	8
4	74	69	5
5	65	60	5
6	76	74	2
7	78	75	3
8	70	66	4
9	61	58	3
10	53	48	5
11	53	42	11
12	52	45	7
13	76	70	6
14	64	53	11
15	60	53	7
16	58	53	5
17	52	48	4
18	72	70	2
19	45	37	8
20	42	38	4
21	78	75	3
22	68	62	6
Σ			116
Mean			5.272727273

From the calculation above, the total of decrease from the pre test and post test in control group was 116. Meanwhile the mean of pre test and post test in control group was 5.27.

So, the hypothesis testing in this research, it was used two average similary test by using statistic, as follows:

$$t - test = \frac{x1 - x2}{\sqrt{\frac{s1^2}{n1} + \frac{s2^2}{n2}}}$$

Where :

$$x1 = 9$$

$$x2 = 5.27$$

$$S1^2 = 28$$

$$S2^2 = 28.06$$

$$n1 = 24$$

$$n2 = 22$$

$$t - test = \frac{9 - 5.27}{\sqrt{\frac{28}{24} + \frac{28.06}{22}}}$$

$$= \frac{3.73}{\sqrt{1.16 + 1.27}}$$

$$= \frac{3.73}{\sqrt{2.43}}$$

$$= \frac{3.73}{1.55}$$

$$= 2.40$$

From the calculation above, it could be seen that $t_{\text{observed}} = 2.40$. The testing hypothesis was conducted in order to find out whether that hypothesis was accepted or rejected. The basis of testing hypothesis was that the H_a is accepted if the $t_{\text{observed}} > t_{\text{table}}$. In this study the calculation of the scores used t-test for the degree of freedom 44 ($df = n + n - 2$) at the level of significant 0.05 that the critical value was 2.02. So it could be seen that $t_{\text{table}} = 2.02$. Therefore the writer hypothesis was accepted, it means there was a significant affective of applying Discovery Learning method in writing ability.

E. Hypothesis Testing

The basis for testing hypothesis as following:

The testing hypothesis conducted in order to find out whether that hypothesis was accepted or rejected. The basis of testing hypothesis was that the H_a was accepted if the $t_{\text{observed}} > t_{\text{table}}$. In this study the calculation of the scores used t-test for the degree of freedom 44 ($df = n + n - 2$) at the level of significant 0.05 that the critical value was 2.02. So it could be that $t_{\text{table}} = 2.02$.

After the scores were calculated, it was found that in this the t_{observed} was higher than the t_{table} . It could be seen as follow:

$$t_{\text{observed}} > t_{\text{table}} (\alpha = 0.05) \text{ with } 44 > 2.02.$$

From the result above, it showed that the alternative hypothesis (H_a) was accepted and the null hypothesis (H_0) was rejected. It means that Discovery Learning affected students' writing ability.

F. Discussion

The focus of this research was the students' ability in writing descriptive text which was taught by applying Discovery Learning method. The result of the research showed the mean of score on the test of students' ability in writing descriptive text that was gotten from the class XI-Ap of SMK Al Washliyah 3 Medan who were taught by Discovery Learning method was higher than the mean of score on the test of the students' ability in writing descriptive text that was gotten from the class XI-Ak who were taught by Teacher-Centered method.

This fact indicated that the application of Discovery Learning method was proven more effective to increase the students' ability in writing descriptive text. It could be accepted because through teaching activity by applying Discovery Learning method encouraged the students to be creative to write, because the students expected to creative to reconstruct the text. Besides that teaching by applying Discovery Learning method was aimed to the students' be more critical thinking.

Based on the data analysis it was found that students which are taught with Discovery Learning method gave improvement in their score. From the data were collected the lowest score of pre test was 40, and the highest score of pre test was 80 and the mean of pre test was 64.75. On the other hand the lowest score of post test was 55, and the highest of post test was 90 and the mean of post test was 73.75.

Whereas in control group, showed the lowest score of pre test was 37, and the highest score of pre test was 75 and the mean of pre test was 57.63. On the

other hand the lowest score of post test was 42, and the highest score of post test was 78 and the mean of post test was 62.90.

Based on the explanation above, the mean score of the post test of experimental group was higher than the mean score of post test in control group ($73.75 > 62.90$). The total score of the mean score in experimental and control group showed that there was significant effect in improvement of students score between pre test and post.

Then the result of the t test showed that the t_{observed} was higher than t_{table} was ($2.40 > 2.02$). It showed that the students' writing ability by applying Discovery Learning method was significant at 0.05. From the result, the researcher found that there was significant of the students' ability that were taught by Discovery Learning method. It means that the students' writing ability that were taught by Discovery Learning method has significant effects.

This result shows that Discovery Learning method has significant effect. It is also relevant with the research that conducted by Ringgi Candraning Prawerti entitled, "The Effectiveness of Using Discovery Learning Method in Teaching Writing Skill Viewed From The Students' Creativity" and also Laelatul Mukharomah research, "The Use of Discovery Learning Model to Improve The SStudents' Descriptive Writing". These results shows that the use of discovery learning can give the effect for the students in writing Descriptive Text.

CHAPTER V

CONCLUSION AND SUGGESTIONS

A. Conclusion

Based on the data analysis, the conclusion was the result of the students' writing ability by applying Discovery Learning method was higher than by applying Teacher-Centered method at the second grade of SMK Al Washliyah 3 Medan. The highest score of Pre- Test in Experimental Class was 80 and the lowest was 40. Then, the highest score of Post Test was 90 and the lowest score was 55. In another hand, the highest score of Pre Test in Control Class was 75 and the lowest was 37. Meanwhile, the highest score in Post Test was 78 and the lowest score was 42.

The calculation of t-test showed that the score of the score of (t_o) 2.40 > the score of (t_t) 2.02. It means that Discovery Learning method has significant effect on students' ability in writing descriptive text. It can be concluded that H_a was accepted.

B. Suggestions

Based on the conclusion of the study, the suggestions of doing this research as follows:

1. The English teachers suggested to apply Discovery Learning method in teaching learning process, especially in teaching writing because it can help the students the make the text creation in writing a good text.

2. The result of this research can be useful for English learners to improve their writing ability.

3. Through applying Discovery Learning method, the students are expected to be no longer dependent on their teachers in receiving feedback. At last, Discovery Learning method is expected to help students to improve their writing.

4. This research is also useful for other researchers who will conduct related research. It is expected that the result of the study can give an informative input to other researchers who want to conduct similar researchers. It is possible for other researchers to conduct experiment or action research to improve speaking or other dependent variables ability through applying Discovery Learning method. It is possible for them to design the same topic from the level of vocational high school to the university based on their need and condition.

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APPENDIX I**RESEARCH INSTRUMENT**

Name :

No :

Class :

PRE-Test*Write a descriptive text based on the picture below!*

RESEARCH INSTRUMENT

Name :

No :

Class :

Post-Test*Write a descriptive text based on the picture below!*

Writing Assessment Rubric

1. Content

Scoring Scale	Alternative Competence of Paragraph Content
30 – 27	Excellent to very good: knowledge, substantive
26 – 22	Good to average: some knowledge of subject, adequate range
21 – 17	Fair to poor: limited knowledge of subject, little substance
16 – 13	Very poor: does not show knowledge of subject, non substantive

2. Organization

Scoring Scale	Alternative Competence of Paragraph Content
20 – 18	Excellent to very good: fluent expression, ideas clearly stated
17 – 14	Good to average: somewhat choppy, loosely organized, but the main ideas stand out
13 – 10	Fair to poor: non-fluent, ideas confused, and disconnected.
9 – 7	Very poor: does not communicate, no organization or not enough to evaluate

3. Vocabulary

Scoring Scale	Alternative Competence of Paragraph Content
20 – 18	Excellent to very good: sophisticated, effective word choice and usage
17 – 14	Good to average: adequate range, occasional error of words/idiom choice, usage but meaning not obscured
13 – 10	Fair to poor: limited range, frequent errors of words/idioms form, choice, and usage
9 – 7	Very poor: essential translation, little knowledge of English vocabulary

4. Language Use

Scoring Scale	Alternative Competence of Paragraph Content
25 – 22	Excellent to very good: effective complex constructions, little mistake in appropriate word function word, article pronoun, preposition
21 – 18	Good to average: effective but simple instruction, a little mistake in appropriate word
17 – 11	Fair to poor: major problem in simple/complex constructions, a little mistake in appropriate word, article, and preposition confused
10 – 5	Very poor: virtually no mastery of sentence construction rules, so many mistakes in sentences

	that is not communicatively, not enough to evaluate.
--	--

5. Mechanic

Scoring Scale	Alternative Competence of Paragraph Content
5	Excellent to very good: demonstrative mastery of convention, little mistake in spelling, punctuation, capitalization
4	Good to average: occasionally error of spelling, punctuation, capitalization, but meaning not obscured
3	Fair to poor: frequent errors of spelling, punctuation, capitalization, and meaning not obscured
2	Very poor: no mastery of convention, dominated by errors of punctuation, capitalization, paragraphing, and writing not enough to evaluate.

Adapted from: C.S. (2002). Assessing Writing Cambridge

APPENDIX II

LESSON PLAN

LESSON PLAN (CONTROL CLASS)

School	: SMK Al-Washliyah 3 Medan
Subject	: English
Class/ Team	: XI / 1st Semester
Aspect	: Writing
Time Allocation	: 6 x 40 minutes (3 x Meeting)

A. Standart of Competence

Expressing the meaning of short functional written text very simple to interact with the closed environment.

B. Basic Competence

Expressing meaning and rhetorical stage in short essay written language accurately, fluently and acceptably to interact with the closed environment in descriptive text/procedure text.

1. Indicators

- Identifying the generic structure of descriptive text
- Identifying language feature of descriptive text
- Respond the meaning of descriptive text
- Arrange the word into a good sentence

2. Objectives

By the end of the lesson students will have been able to arrange the word into a good sentence.

3. Material

Meeting 1

Descriptive text is a text which say what a person or a thing is like. Its purpose is to describe and reveal a particular person, place, or thing.

The Generic Structure of Descriptive Text

- * Identification to identifying the phenomenon to be described.
- * Description to describing the phenomenon in parts, qualities, or/and characteristics.

The Language Features of Descriptive Text

The use of adjectives and compound adjectives.
example:

- a five hundred seated football stadium.
- a beautiful ancient Roman opera house.

The use of Linking Verbs/ relating verbs.

example :

- The temple is so magnificent.
- The temple consists of five terraces.

The use of Simple Present Tense

example. :

- The museum houses hundreds of Greek Statues.
- The hotel provides 450 rooms and a large swimming pool.

The use of degree of comparison

example :

- The weather in Jakarta is hotter than Bandung.
- Bogor has the same weather as Ungaran.

Generic Structure	Example
Identification	My mother is a beautiful person.
Description	<p>She is not tall but not short, and she has curly hair and brown. Her eyes color are like honey and her color skin color light brown, and she has a beautiful smile. Her weight likes 120 lbs. She is a very kind person. She is very lovely, friendly, patient, and she loves to help people. I love my mom, because she is a good example to me.</p> <p>She loves being in the mosque, and she loves sing and dance too. She is a very good child, wife and mother. She always takes care of her family. She likes her house to be clean an organized. She a very organized person, and all things in the house are in the right place. She doesn't like messes.</p> <p>She always has a smile on her face. She is so sweet and lovely. I like when I am going to sleep or went I wake up or when I am going to go to some places, she always give me a kiss, and when the family have a problem she always be with</p>

	us to helps us and to give us all her love.
--	---

4. Method of Learning / Technique

Conventional

5. Procedure

Meeting 2

	Activity	Time	Method	Sample of Instruction
	Opening <ul style="list-style-type: none"> Teacher expresses greeting and opening Teaching learning by <i>Bismillah</i> By question answer, teacher prepare psychologically and physicaly to allow teaching learning process Teacher checks students' attendance 	10 Minutes	Question - Answer	<i>Assalamu' alaiku m... Good Morning class, how are you today? Before we start the lesson today, let's read Basmallah together!</i> <i>Who is absent today? Why he/she absent?</i>

	<ul style="list-style-type: none"> • Teacher explains the aim of learning and competence basic competence which will be achieved 			
	<p>Core activities</p> <p>❖ <i>Exploration</i></p> <ul style="list-style-type: none"> • Teacher gives a text to students • Teacher asks to read it <p>❖ <i>Elaboration</i></p> <ul style="list-style-type: none"> • Teacher explains the material • Teacher asks students to pay attention • Teacher gives a test to students <p>❖ <i>Confirmation</i></p> <ul style="list-style-type: none"> • Teacher gives feedback, motivation, and 	60 minutes	Threading phase	<p><i>There is a text, then please read it.</i></p> <p><i>Descriptive text is.....</i></p> <p><i>Please pay attention to my explanation</i></p> <p><i>Here, there are some questions then you have to answer it by yourself</i></p> <p><i>Okey, students if you</i></p>

	<p>appreciation for students' success</p> <ul style="list-style-type: none"> • Teacher gives a motivation for students who have less active in teaching learning process. 			<p><i>have done, we check your work together</i></p>
	<p>Closing</p> <ul style="list-style-type: none"> • Teacher and students do reflection for process and the result of the teaching learning • Teacher asks student to give an impression for giving feedback, for example what is difficulty that faced and the impression to the lesson • Teacher gives homework 	<p>10</p> <p>Minutes</p>	<p>Reflection Assessment</p>	<p><i>How about material today? Is it clear for you?</i></p> <p><i>Do you still remember what is descriptive text?</i></p>

	k to bring a picture of their family • Teacher pays attention to hopes and advices that teacher presents.			
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6. Media

- Some texts

7. Source

Pusat perbukuan Departemen Pendidikan Nasional, *English in Focus for Grade VII*, Semarang: PT. Bengawan Ilmu, 2008.

1. <http://diofebrilian.blogspot.com/2012/12/descriptive-text.html>

8. Assesment

- a. Technique** : The students are assigned to write a descriptive text based on the some clues of picture.
- b. Form** : Written test
- c. Aspects to be assessed** :

Indicator	Assesment		
	Technic	Form	Instrument
1. Complete this paragraph with the words given in the box	Tes Tulis	Multiple Choice	1. Complete the sentence bellow
2. Arrange these sentences into a coherent paragraph	Tes Tulis	Essay	2. Arrange these words to be a good sentence

d. Instrument:

Name:

Class:

A. Complete the sentence bellow!

The Headmaster

Mr.Ridwan (1)..... the headmaster of my school. He (2)..... not wear glasses. His eyes always frighten me even when I refuse to face them. They are sharp, hard, and cold, and he uses them like a whip.

He always (3)..... his hands in a basin in the corner of the room. After he has washed them, he will walk over to his desk and stand behind is looking at the pupils while he dries his hands on a small, white towel. He dries each finger separetely, beginning with the first finger. His fingers are long and white. He rubs them briskly without losing the effect of deliberation and as he rubs them, he looks at us with his eyes.

No one moves while he (4).....his hands, no one speaks. When he (5)....., he will fold the towel and put it in the desk drawer. Then, he will awkwardly smile at us. He really terrifies me.

6. What is the text about?
 - a. Repport Text
 - b. Narrative text
 - c. Descriptive text
 - d. Recount text

7. How is the generic structure of that text?
 - a. identification-description
 - b. orientation-complication-resolution-reorientation
 - c. description-identification
 - d. complication-reorientation-orientation-resolution

8. Who is the Mr. Ridwan?
 - a. The head master of School
 - b. The teacher of school
 - c. The students
 - d. The security of school

9. Does Mr. Ridwan use glasses?
- Yes, He does
 - No, He does not
 - Yes, He is
 - No, He is not
10. What is the purpose of the text?
- To describe the head master
 - To entertain the reader about the head master
 - To tell about the head master
 - To retell about the head master

B. Arrange this words to be a good sentence

- walk-my-the-on-I-friends-street-with
- doctor-father-a-is-My
- family-My-for-Borobudur-picnic-the-go-to
- always-write-my-letter-I-a-best-for-friend
- school-morning-every-with-go-friend-to-I-my

Medan, 2018

English Teacher

Researcher

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Headmaster

Bambang Hermanto, S.Pd
NIP:

LESSON PLAN
(EXPERIMENTAL CLASS)

School : SMK Al-Washliyah 3 Medan
Subject : English
Class/ Team : XI / 1st Semester
Aspect : Writing
Time Allocation : 6 x 40 minutes (3 x Meeting)

STANDART OF COMPETENCE

Expressing the meaning of short functional written text very simple to interact with the closed environment.

BASIC COMPETENCE

Expressing meaning and rhetorical stage in short essay written language accurately, fluently and acceptably to interact with the closed environment in descriptive text/procedure text.

1. Indicators

- Identifying the generic structure of descriptive text
- Identifying language feature of descriptive text

2. Objectives

- By the end of the lesson students will have been able to write a simple descriptive text well

3. Material

Descriptive text is a text which say what a person or a thing is like. Its purpose is to describe and reveal a particular person, place, or thing.

The Generic Structure of Descriptive Text

- * Identification to identifying the phenomenon to be described.
- * Description to describing the phenomenon in parts, qualities, or/and characteristics.

The Language Features of Descriptive Text

The use of adjectives and compound adjectives. example:

- a five hundred seated football stadium.
- a beautiful ancient Roman opera house.

The use of Linking Verbs/ relating verbs.

example :

- The temple is so magnificent.
- The temple consists of five terraces.

The use of Simple Present Tense

example :

- The museum houses hundreds of Greek Statues.
- The hotel provides 450 rooms and a large swimming pool.

The use of degree of comparison

example :

- The weather in Jakarta is hotter than Bandung.

- Bogor has the same weather as Ungaran.

Generic Structure	Example
Identification	Gandi is one of my classmates
Description	He is a smart and hard working student. He is thirteen years old. His hobby is camping. He goes to Junior High School and He is in the seventh grade. He is good at every subject at school but his favorite subject is English.

4. Method of Learning / Technique

- a. Discovery Learning
- b. Team pairs shared

5. Procedure

First meeting

	Activity	Time	Method	Sample of Instruction

	<p>Opening</p> <ul style="list-style-type: none"> • Teacher expresses greeting and opening Teaching learning by <i>Bismillah</i> • By question answer, teacher prepare psychologically and physicaly to allow teaching learning process • Teacher checks students' attendance • Teacher explains the aim of learning and competence basic competence which will be achieved 	10 minutes	Questions - Answer	<p><i>Assalamu' alaiku m... Good Morning class, how are you today? Before we start the lesson today, let's read Basmallah together!</i></p> <p><i>Who is absent today? Why he/she absent?</i></p>
	<p>Core activities</p> <ul style="list-style-type: none"> ❖ <i>Exploration</i> • Teacher 	60 minutes	Discussion	<p><i>Before we jump to the material, I</i></p>

	<p>gives stimulation by asking students to sing together, sing a song “family”</p> <ul style="list-style-type: none"> • Students are given a question, what thing that make you proud of your family? ❖ <i>Elaboration</i> • Students answer that question by Discussing with their group, make sure that every student gives their idea, and the secretary of group write their ideas in list. • Students select the data which 	u t e s	r y L e a r n i n g	<p><i>have lyric of a song, would you like to sing this song together?</i></p> <p><i>After we sing this song, I have a question for you, what the things that makes you proud of your family?</i></p> <p><i>Is there anyone have the answer?</i></p> <p><i>Yes you, please.</i></p> <p><i>..</i></p> <p><i>Okay, the answer is right, then I will divide you</i></p>
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	<p>one is right which one is wrong.</p> <ul style="list-style-type: none"> • Students observe the picture which has brought by them, then they identify characteristic and type in the picture. • Students discuss it with their partner • Teacher explains descriptive text • Teacher asks students to write the result of data in a Paragraph descriptive text ❖ <i>Confirmation</i> • Teacher gives feedback, motivation 			<p><i>into four groups, and please discuss it more with your group!</i></p> <p><i>Select the data from your member, then chose which one is right.</i></p> <p><i>Please, everyone back to your seat and then open your picture of your family, then identify it! You can, do it with your partner</i></p> <p><i>Have you done, okay everyone pay</i></p>
--	---	--	--	--

	<p>n, and appreciation for students' success</p> <ul style="list-style-type: none"> Teacher gives a motivation for students who have less active in teaching learning process 			<p><i>attention for my explanation !</i></p> <p><i>If you have unders tood, please continue your work by writing it into descriptive text</i></p> <p><i>Okay, students if you have done, we check your work together</i></p> <p><i>This answer is incorrect, you can check in your dictionary right?</i></p>
	<p>Closing</p> <ul style="list-style-type: none"> Teacher and students do reflection 	<p>10</p> <p>M</p> <p>i</p> <p>n</p> <p>u</p>	<p>Refl</p> <p>e</p> <p>c</p> <p>t</p> <p>i</p>	<p><i>How about material today? Is it clear for</i></p>

	<p>for process and the result of the teaching learning</p> <ul style="list-style-type: none"> • Teacher asks student to give an impression for giving feedback, for example what is difficulty that faced and the impression to the lesson • Teacher gives homework to bring a picture of their family • Teacher pays attention to hopes and advices that teacher presents. 	<p>t e s</p>	<p>o n</p> <p>Assessment</p>	<p>you?</p> <p><i>Do you still remember what is descriptive text?</i></p>
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6. Media

- Some pictures of family

- Lyric song (Conditional)

7. Source

Pusat perbukuan Departemen Pendidikan Nasional, *English in Focus for Grade VII*, Semarang: PT. Bengawan Ilmu, 2008.

www.songforteaching.com/familysong/familyarespecialtome.php

<http://diofebrilian.blogspot.com/2012/12/descriptive-text.html>

8. Assesment

1. Technique : The students are assigned to write a descriptive text.
2. Form : Written test

3. Aspects to be assessed :

CRITERIA	SCORE	LEVEL
Content	30-27	EXCELLENT TO VERY GOOD
	26-22	Knowledgeable, substantive, thorough development of thesis, relevant to assigned topic.
	21-17	GOOD TO AVERAGE Some knowledge of subject, adequate range, limited development of thesis, mostly relevant to the topic but lack detail.
	16-13	FAIR TO POOR Limited knowledge of subject, little substance, inadequate development of topic. VERY POOR Does not show knowledge of subject, non-substantive, non-pertinent, not enough to evaluate.
Organization	20-18	EXCELLENT TO VERY GOOD

	17-14	Fluent expression, ideas clearly stated/supported, succinct, well organized, logical sequencing, cohesive
	13-10	GOOD TO AVERAGE Somewhat choppy, loosely organized but main ideas stand out, limited support, logical but incomplete sequencing
	9-7	FAIR TO POOR Non-fluent, ideas confused or , lacks logical sequencing and development
		VERY POOR Does not communicate, no organization, not enough to evaluate
Vocabulary	20-18	EXCELLENT TO VERY GOOD
	17-14	Sophisticated range, effective word/idiom choice and usage, word form material, appropriate register
	13-10	GOOD TO AVERAGE Adequate average, occasional errors of word/idiom form; choice; usage but meaning not obscured
	9-7	FAIR TO POOR Limited range, frequent errors of word/idiom form; choice; usage, meaning confused or obscured
		VERY POOR Essentially translation, little knowledge of English vocabulary ; idioms; word form, not enough to evaluate
Language Use	25-22	EXCELLENT TO VERY GOOD

	21-18	Effective complex constructions, few errors of agreement; tense; number; word order/function; articles; pronouns; prepositions
	17-11	GOOD TO AVERAGE Effective but simple constructions, minor problems in complex constructions, several errors of agreement; tenses; number; word order/function; articles; pronouns; prepositions, but
	10-5	meaning seldom obscured FAIR TO POOR Major problem in simple/complex constructions, frequent errors of negation; agreement; tenses; number; word order/function; articles; pronouns; prepositions and/or fragments; run-ons deletions, meaning confused or obscured
		VERY POOR Virtually no mastery of sentence construction rules, dominated by errors, does not communicate, not enough to evaluate.
Mechanics	5	EXCELLENT TO VERY GOOD:
	4	Demonstrates mastery of conventions, errors of spelling, punctuation; capitalization, paragraphing GOOD TO AVERAGE: Occasional errors of

	3	spelling,; punctuation; capitalization; paragraphing but meaning not obscured
	2	FAIR TO POOR: Frequent errors of spelling; punctuation; capitalization; paragraphing,, poor handwriting, meaning confused or obscured VERY POOR: No master of conventions, dominated by errors of spelling; punctuation; capitalization; paragraphing, handwriting illegible or not enough to evaluate.

9. Instrument

1. Write descriptive text based on the picture of students' family.

Medan, 2018

English Teacher

Researcher

Alvie Khairina, S.Pd
NIP:

Novriana Rahma S.
NIM: 341430049

Headmaster

Bambang Hermanto, S.Pd
NIP:

APPENDIX III

The Students' Score in Pre-test and Post Test of Experimental Class

No.	Students' Initial	Pre Test	Post Test
1	RP	40	55
2	NSS	50	62
3	FF	50	62
4	TA	53	63
5	ASW	53	65
6	DY	53	65
7	DNC	59	67
8	DA	59	67
9	SST	61	68
10	CS	62	70
11	EA	63	72
12	ARR	65	72
13	SR	65	73
14	SFN	66	74
15	AP	69	78
16	FDY	71	78
17	NS	71	78
18	NH	75	80
19	SM	75	83
20	VRS	75	84
21	SD	79	84
22	NUS	80	90
23	PS	80	90
24	UK	80	90
Total		1554	1770
Mean		64.75	73.75
Min		40	55
Max		80	90

APPENDIX IV

The Students' Score in Pre-test and Post Test of Control Class

No.	Students' Initial	Pre Test	Post Test
1	AK	62	65
2	DNP	58	62
3	EW	52	60
4	ES	69	74
5	FA	60	65
6	HF	74	76
7	IR	75	78
8	JAH	66	70
9	KS	58	61
10	NP	48	53
11	NAP	42	53
12	NS	45	52
13	RA	70	76
14	RAS	53	64
15	SL	53	60
16	AO	53	58
17	SH	48	52
18	TAW	70	72
19	WAA	37	45
20	YP	38	42
21	YMSS	75	78
22	ZA	62	68
Total		1268	1384
Mean		57.6363636	62.90909091
Max		75	78
Min		37	42

APPENDIX V

Frequency Distribution of Pre Test in Experimental Class

No	Xi	Fi	Fi.Xi	Xi ²	Fi.Xi ²
1	40	1	40	1600	1600
2	50	2	100	2500	5000
3	53	3	159	2809	8427
4	59	2	118	3481	6962
5	61	1	61	3721	3721
6	62	1	62	3844	3844
7	63	1	63	3969	3969
8	65	2	130	4225	8450
9	66	1	66	4356	4356
10	69	1	69	4761	4761
11	71	2	142	5041	10082
12	75	3	225	5625	16875
13	79	1	79	6241	6241
14	80	3	240	6400	19200
Total	893	24	1554	58573	103488

APPENDIX VI

Frequency Distribution of Pre Test in Control Class

No	Xi	Fi	Fi.Xi	Xi ²	Fi.Xi ²
1	37	1	37	1369	1369
2	38	1	38	1444	1444
3	42	1	42	1764	1764
4	45	1	45	2025	2025
5	48	2	96	2304	4608
6	52	1	52	2704	2704
7	53	3	159	2809	8427
8	58	2	116	3364	6728
9	60	1	60	3600	3600
10	62	2	124	3844	7688
11	66	1	66	4356	4356
12	69	1	69	4761	4761
13	70	2	140	4900	9800
14	74	1	74	5476	5476
15	75	2	150	5625	11250
Total	849	22	1268	50345	76000

APPENDIX VII

Frequency Distribution of Post Test in Experimental Class

No	Xi	Fi	Fi.Xi	Xi ²	Fi.Xi ²
1	55	1	55	3025	3025
2	62	2	124	3844	7688
3	63	1	63	3969	3969
4	65	2	130	4225	8450
5	67	2	134	4489	8978
6	68	1	68	4624	4624
7	70	1	70	4900	4900
8	72	2	144	5184	10368
9	73	1	73	5329	5329
10	74	1	74	5476	5476
11	78	3	234	6084	18252
12	80	1	80	6400	6400
13	83	1	83	6889	6889
14	84	2	168	7056	14112
15	90	3	270	8100	24300
Total	1084	24	1770	79594	132760

APPENDIX VIII

Frequency Distribution of Post Test in Control Class

No	Xi	Fi	Fi.Xi	Xi ²	Fi.Xi ²
1	42	1	42	1764	1764
2	45	1	45	2025	2025
3	52	2	104	2704	5408
4	53	2	106	2809	5618
5	58	1	58	3364	3364
6	60	2	120	3600	7200
7	61	1	61	3721	3721
8	62	1	62	3844	3844
9	64	1	64	4096	4096
10	65	2	130	4225	8450
11	68	1	68	4624	4624
12	70	1	70	4900	4900
13	72	1	72	5184	5184
14	74	1	74	5476	5476
15	76	2	152	5776	11552
16	78	2	156	6084	12168
Total	1000	22	1384	64196	89394

APPENDIX IX

Worktable of Normality Test of Pre-test at Experimental Class

No	Score	Zi	F(Zi)	S(Zi)	F(Zi)-S(Zi)
1	40	-2.21	0.013552581	0.04	-0.026447419
2	50	-1.32	0.093417509	0.12	-0.026582491
3	50	-1.32	0.093417509	0.12	-0.026582491
4	53	-1.05	0.146859056	0.25	-0.103140944
5	53	-1.05	0.146859056	0.25	-0.103140944
6	53	-1.05	0.146859056	0.25	-0.103140944
7	59	-0.51	0.305025731	0.33	-0.024974269
8	59	-0.51	0.305025731	0.33	-0.024974269
9	61	-0.33	0.370699981	0.37	0.000699981
10	62	-0.24	0.405165128	0.41	-0.004834872
11	63	-0.15	0.440382308	0.45	-0.009617692
12	65	0.02	0.507978314	0.54	-0.032021686
13	65	0.02	0.507978314	0.54	-0.032021686
14	66	0.11	0.543795313	0.58	-0.036204687
15	69	0.38	0.648027292	0.62	0.028027292
16	71	0.56	0.712260281	0.70	0.012260281
17	71	0.56	0.712260281	0.70	0.012260281
18	75	0.91	0.818588745	0.83	-0.011411255
19	75	0.91	0.818588745	0.83	-0.011411255
20	75	0.91	0.818588745	0.83	-0.011411255
21	79	1.27	0.897957685	0.87	0.027957685
22	80	1.36	0.913085038	1	-0.086914962
23	80	1.36	0.913085038	1	-0.086914962
24	80	1.36	0.913085038	1	-0.086914962
Total	1554	Lo = 0.028			
Mean	64.75	Lt = 0.173			

APPENDIX X

Worktable of Normality Test of Post-test at Experimental Class

No	Score	Zi	F(Zi)	S(Zi)	F(Zi)-S(Zi)
1	55	-1.90	0.02871656	0.04	-0.01128344
2	62	-1.19	0.117023196	0.12	-0.002976804
3	62	-1.19	0.117023196	0.12	-0.002976804
4	63	-1.09	0.137856572	0.16	-0.022143428
5	65	-0.89	0.186732943	0.25	-0.063267057
6	65	-0.89	0.186732943	0.25	-0.063267057
7	67	-0.68	0.24825223	0.33	-0.08174777
8	67	-0.68	0.24825223	0.33	-0.08174777
9	68	-0.58	0.280957309	0.37	-0.089042691
10	70	-0.38	0.351972708	0.41	-0.058027292
11	72	-0.17	0.432505068	0.5	-0.067494932
12	72	-0.17	0.432505068	0.5	-0.067494932
13	73	-0.07	0.47209683	0.54	-0.06790317
14	74	0.02	0.507978314	0.58	-0.072021686
15	78	0.43	0.666402179	0.70	-0.033597821
16	78	0.43	0.666402179	0.70	-0.033597821
17	78	0.43	0.666402179	0.70	-0.033597821
18	80	0.63	0.735652708	0.75	-0.014347292
19	83	0.94	0.82639122	0.79	0.03639122
20	84	1.04	0.85083005	0.87	-0.01916995
21	84	1.04	0.85083005	0.87	-0.01916995
22	90	1.65	0.950528532	1	-0.049471468
23	90	1.65	0.950528532	1	-0.049471468
24	90	1.65	0.950528532	1	-0.049471468
Total	1770	Lo = 0.036			
Mean	73.75	Lt = 0.173			

APPENDIX XI

Worktable of Normality Test of Pre-test at Control Class

No	Score	Zi	F(Zi)	S(Zi)	F(Zi)-S(Zi)
1	37	-1.75	0.040059157	0.04	0.00005915
2	38	-1.66	0.048457226	0.09	-0.0415428
3	42	-1.32	0.093417509	0.13	-0.0365825
4	45	-1.07	0.142309654	0.18	-0.0376903
5	48	-0.81	0.208970088	0.27	-0.0610299
6	48	-0.81	0.208970088	0.27	-0.0610299
7	52	-0.47	0.319177509	0.31	0.00917751
8	53	-0.39	0.348268273	0.45	-0.1017317
9	53	-0.39	0.348268273	0.45	-0.1017317
10	53	-0.39	0.348268273	0.45	-0.1017317
11	58	0.03	0.511966473	0.54	-0.0280335
12	58	0.03	0.511966473	0.54	-0.0280335
13	60	0.20	0.579259709	0.59	-0.0107403
14	62	0.37	0.644308755	0.68	-0.0356912
15	62	0.37	0.644308755	0.68	-0.0356912
16	66	0.71	0.761147932	0.72	0.04114793
17	69	0.96	0.831472393	0.77	0.06147239
18	70	1.05	0.853140944	0.86	-0.0068591
19	70	1.05	0.853140944	0.86	-0.0068591
20	74	1.38	0.916206678	0.90	0.01620668
21	75	1.47	0.929219123	1	-0.0707809
22	75	1.47	0.929219123	1	-0.0707809
Total	1268	Lo = 0.061			
Mean	57.636364	Lt = 0.190			

APPENDIX XII

Worktable of Normality Test of Post-test at Control Class

No	Score	Zi	F(Zi)	S(Zi)	F(Zi)-S(Zi)
1	42	-1.98	0.023851764	0.04	-0.016148236
2	45	-1.70	0.044565463	0.09	-0.045434537
3	52	-1.03	0.151505003	0.18	-0.028494997
4	52	-1.03	0.151505003	0.18	-0.028494997
5	53	-0.94	0.17360878	0.27	-0.09639122
6	53	-0.94	0.17360878	0.27	-0.09639122
7	58	-0.46	0.32275811	0.31	0.01275811
8	60	-0.27	0.393580127	0.4	-0.006419873
9	60	-0.27	0.393580127	0.4	-0.006419873
10	61	-0.18	0.428576284	0.45	-0.021423716
11	62	-0.08	0.468118628	0.5	-0.031881372
12	64	0.10	0.539827837	0.54	-0.000172163
13	65	0.19	0.575345435	0.63	-0.054654565
14	65	0.19	0.575345435	0.63	-0.054654565
15	68	0.48	0.684386303	0.68	0.004386303
16	70	0.67	0.748571105	0.72	0.028571105
17	72	0.86	0.805105479	0.77	0.035105479
18	74	1.05	0.853140944	0.81	0.043140944
19	76	1.24	0.892512303	0.90	-0.007487697
20	76	1.24	0.892512303	0.90	-0.007487697
21	78	1.43	0.92364149	1	-0.07635851
22	78	1.43	0.92364149	1	-0.07635851
Total	1384	Lo = 0.043			
Mean	62.9091	Lt = 0.190			

APPENDIX XIII

Mean of Post-Test -Pre Test in Experimental Group

No.	Score Post Test	Score Pre Test	Decrease
1	78	69	9
2	72	65	7
3	65	53	12
4	70	62	8
5	67	53	14
6	63	59	4
7	65	59	6
8	72	63	9
9	78	71	7
10	62	50	12
11	62	50	12
12	78	71	7
13	80	75	5
14	90	80	10
15	90	80	10
16	55	40	15
17	83	75	8
18	84	79	5
19	68	61	7
20	74	66	8
21	73	65	8
22	67	53	14
23	90	80	10
24	84	75	9
Σ Mean			216
			9

APPENDIX XIV**Mean of Post-Test -Pre Test in Control Group**

No.	Score Post Test	Score Pre Test	Decrease
1	65	62	3
2	62	58	4
3	60	52	8
4	74	69	5
5	65	60	5
6	76	74	2
7	78	75	3
8	70	66	4
9	61	58	3
10	53	48	5
11	53	42	11
12	52	45	7
13	76	70	6
14	64	53	11
15	60	53	7
16	58	53	5
17	52	48	4
18	72	70	2
19	45	37	8
20	42	38	4
21	78	75	3
22	68	62	6
Σ			116
Mean			5.272727273

APPENDIX XV

Homogeneity Test of Pre Test

$$F_{\text{obs}} \frac{S_1^2}{S_2^2}$$

Where: S_1^2 = the biggest variant

S_2^2 = the smallest variant

Based on the variants of both samples of pre-test found that :

$$S^2_{\text{ex}} = 124.63 \quad N = 24$$

$$S^2_{\text{co}} = 138.90 \quad N = 22$$

So,

$$F_{\text{obs}} = \frac{S^2_{\text{ex}}}{S^2_{\text{co}}}$$

$$= \frac{124.63}{138.90}$$

$$= 0.89$$

Then the coefficient of $F_{\text{obs}} = 0.89$ was compared with F_{table} where F_{table} was determined at real level $\alpha = 0.05$ and the same numerator dk $= N - 1 = 22 - 1 = 21$ that was exist dk numerator 21 the denominator dk $= n - 1$ ($24 - 1 = 23$). Then F_{table} can be calculated $F_{0.05(21,23)} = 2.036$

So $F_{\text{obs}} < F_{\text{table}}$ atau ($0.89 < 2.036$) so it can be concluded that the variant was homogenous.

APPENDIX XVI

Homogeneity Test of Post Test

$$F_{\text{obs}} \frac{S_1^2}{S_2^2}$$

Where: S_1^2 = the biggest variant

S_2^2 = the smallest variant

Based on the variants of both samples of pre-test found that :

$$S^2_{\text{ex}} = 96.63 \quad N = 24$$

$$S^2_{\text{co}} = 110.84 \quad N = 22$$

So,

$$F_{\text{obs}} = \frac{S^2_{\text{ex}}}{S^2_{\text{co}}} \\ = \frac{96.63}{110.84}$$

$$= 0.87$$

Then the coefficient of $F_{\text{obs}} = 0.87$ was compared with F_{table} where F_{table} was determined at real level $\alpha = 0.05$ and the same numerator dk $= N - 1 = 22 - 1 = 21$ that was exist dk numerator 21 the denominator dk $= n - 1$ ($24 - 1 = 23$). Then F_{table} can be calculated $F_{0.05(21,23)} = 2.036$.

So $F_{\text{obs}} < F_{\text{table}}$ atau ($0.87 < 2.036$) so it can be concluded that the variant was homogenous.

APPENDIX XVII

Hypothesis Testing

The testing hypothesis conducted in order to find out whether that hypothesis was accepted or rejected. The basis of testing hypothesis is that the H_a was accepted if the $t_{\text{observed}} > t_{\text{table}}$. In this study the calculation of the scores uses t-test for the degree of freedom 44 ($df = n_1 + n_2 - 2$) at the level of significant 0.05 that the critical value was 2.02. So it can be that $t_{\text{table}} = 2.02$.

After the scores were calculated, it was found that in this the t_{observed} was higher than the t_{table} . It can be seen as follow:

$$t_{\text{observed}} > t_{\text{table}} (\alpha = 0.05) \text{ with } 44 > 2.02.$$

From the result above, it shows that the alternative hypothesis (H_a) was accepted and the null hypothesis (H_0) is rejected. It means that Discovery Learning affect students' writing ability.

APPENDIX XVIII

THE CRITICAL VALUE LILIEFORS TEST

Nilai Kritis L Untuk Uji Lilliefors					
Ukuran Sampel (n)	Tingkat Nyata (α)				
	0,01	0,05	0,10	0,15	0,20
4	0,417	0,381	0,352	0,319	0,300
5	0,405	0,337	0,315	0,299	0,285
6	0,364	0,319	0,294	0,277	0,265
7	0,348	0,300	0,276	0,258	0,247
8	0,331	0,285	0,261	0,244	0,233
9	0,311	0,271	0,249	0,233	0,223
10	0,294	0,258	0,239	0,224	0,215
11	0,284	0,249	0,230	0,217	0,206
12	0,275	0,242	0,223	0,212	0,199
13	0,268	0,234	0,214	0,202	0,190
14	0,261	0,227	0,207	0,194	0,183
15	0,257	0,220	0,201	0,187	0,177
16	0,250	0,213	0,195	0,182	0,173
17	0,245	0,206	0,189	0,177	0,169
18	0,239	0,200	0,184	0,173	0,166
19	0,235	0,195	0,179	0,169	0,163
20	0,231	0,190	0,174	0,166	0,160
25	0,200	0,173	0,158	0,147	0,142
30	0,187	0,161	0,144	0,136	0,131
> 30	$\frac{1,031}{\sqrt{n}}$	$\frac{0,886}{\sqrt{n}}$	$\frac{0,805}{\sqrt{n}}$	$\frac{0,768}{\sqrt{n}}$	$\frac{0,736}{\sqrt{n}}$

Sumber: Sudjana, M. G. S. S. Bandung, Tarsito, 1989.

APPENDIX XIX

Nukilan Tabel Nilai “t” Untuk Berbagai Df

<i>df</i> atau <i>db</i>		
	Harga Kritis "t" Pada Taraf Signifikansi:	
	5%	1%
26	2,06	2,78
27	2,05	2,77
28	2,05	2,76
29	2,04	2,76
30	2,04	2,75
35	2,03	2,72
40	2,02	2,71
45	2,02	2,69
50	2,01	2,68
60	2,00	2,65
70	2,00	2,65
80	1,99	2,64
90	1,99	2,63
100	1,98	2,63
125	1,98	2,62
150	1,98	2,61
200	1,97	2,60
300	1,97	2,59
400	1,97	2,59
500	1,96	2,59
1000	1,96	2,58

Referensi: Anas Sudijono, (2003) *Pengantar Statistik Pendidikan*, Jakarta: PT. Raja Grafindo Persada

APPENDIX XX**TABLE OF DISTRIBUTION**

Nilai Kritis Distribusi F
 untuk dk_1 pembilang dan dk_2 penyebut
 pada taraf signifikansi 5% atau $F_{05}(dk_1, dk_2)$

$dk_2 \backslash dk_1$	1	2	3	4	5	6	7	8	9	10
1	161.446	199.499	215.707	224.583	230.160	233.988	236.767	238.864	240.543	241.882
2	18.513	19.000	19.184	19.247	19.296	19.329	19.353	19.371	19.385	19.396
3	10.128	9.552	9.277	9.117	8.913	8.741	8.607	8.495	8.412	8.345
4	7.709	6.944	6.591	6.388	6.256	6.163	6.094	6.041	5.999	5.964
5	6.608	5.786	5.409	5.192	5.050	4.950	4.876	4.818	4.772	4.735
6	5.987	5.143	4.757	4.534	4.387	4.284	4.207	4.147	4.099	4.060
7	5.591	4.737	4.347	4.120	3.972	3.866	3.787	3.726	3.677	3.637
8	5.318	4.459	4.066	3.838	3.688	3.581	3.500	3.438	3.388	3.347
9	5.117	4.256	3.863	3.633	3.482	3.374	3.293	3.230	3.179	3.137
10	4.965	4.103	3.708	3.478	3.326	3.217	3.135	3.072	3.020	2.978
11	4.844	3.982	3.587	3.357	3.204	3.095	3.012	2.948	2.896	2.854
12	4.747	3.885	3.490	3.259	3.106	2.996	2.913	2.849	2.796	2.753
13	4.667	3.806	3.411	3.179	3.025	2.915	2.832	2.767	2.714	2.671
14	4.600	3.739	3.344	3.112	2.958	2.848	2.764	2.699	2.646	2.602
15	4.543	3.682	3.287	3.056	2.901	2.790	2.707	2.641	2.588	2.544
16	4.494	3.634	3.239	3.007	2.852	2.741	2.657	2.591	2.538	2.494
17	4.451	3.592	3.197	2.965	2.810	2.699	2.614	2.548	2.494	2.450
18	4.414	3.555	3.160	2.928	2.773	2.661	2.577	2.510	2.456	2.412
19	4.381	3.522	3.127	2.895	2.740	2.628	2.544	2.477	2.423	2.378
20	4.351	3.493	3.098	2.866	2.711	2.599	2.514	2.447	2.393	2.348
21	4.325	3.467	3.072	2.840	2.685	2.573	2.488	2.420	2.366	2.321
22	4.301	3.443	3.049	2.817	2.661	2.549	2.464	2.397	2.342	2.297
23	4.279	3.422	3.028	2.796	2.640	2.528	2.442	2.375	2.320	2.275
24	4.260	3.403	3.009	2.776	2.621	2.508	2.423	2.355	2.300	2.255
25	4.242	3.385	2.991	2.759	2.603	2.490	2.405	2.337	2.282	2.236
26	4.225	3.369	2.975	2.743	2.587	2.474	2.388	2.321	2.265	2.220
27	4.210	3.354	2.960	2.728	2.572	2.459	2.373	2.305	2.250	2.204
28	4.196	3.340	2.947	2.714	2.558	2.445	2.359	2.291	2.236	2.190
35	4.121	3.267	2.874	2.641	2.485	2.372	2.285	2.217	2.161	2.114
40	4.085	3.232	2.839	2.606	2.449	2.336	2.249	2.180	2.124	2.077
50	4.034	3.183	2.790	2.557	2.400	2.286	2.199	2.130	2.073	2.026
60	4.001	3.150	2.758	2.525	2.368	2.254	2.167	2.097	2.040	1.993
70	3.978	3.128	2.736	2.503	2.346	2.231	2.143	2.074	2.017	1.969
80	3.960	3.111	2.719	2.486	2.329	2.214	2.126	2.055	1.999	1.951
90	3.947	3.098	2.706	2.473	2.316	2.201	2.113	2.043	1.986	1.938
100	3.936	3.087	2.696	2.463	2.305	2.191	2.103	2.032	1.975	1.927
200	3.888	3.041	2.650	2.417	2.259	2.144	2.056	1.985	1.927	1.878
300	3.873	3.026	2.635	2.402	2.244	2.129	2.040	1.969	1.911	1.862
400	3.865	3.018	2.627	2.394	2.237	2.121	2.032	1.962	1.903	1.854
500	3.860	3.014	2.623	2.390	2.232	2.117	2.028	1.957	1.899	1.850
1000	3.851	3.005	2.614	2.381	2.223	2.108	2.019	1.948	1.889	1.840

dk ₁	11	12	13	14	15	16	17	18	19	20	21
1	242.981	243.905	244.690	245.363	245.949	246.466	246.917	247.324	247.688	248.016	248.307
2	19.405	19.412	19.419	19.424	19.429	19.433	19.437	19.440	19.443	19.446	19.448
3	8.763	8.745	8.729	8.715	8.703	8.692	8.683	8.675	8.667	8.660	8.654
4	5.936	5.912	5.891	5.873	5.858	5.844	5.832	5.821	5.811	5.803	5.795
5	4.704	4.678	4.655	4.636	4.619	4.604	4.590	4.579	4.568	4.558	4.549
6	4.027	4.000	3.976	3.956	3.938	3.922	3.908	3.896	3.884	3.874	3.865
7	3.603	3.575	3.550	3.529	3.511	3.494	3.480	3.467	3.455	3.445	3.435
8	3.313	3.284	3.259	3.237	3.218	3.202	3.187	3.173	3.161	3.150	3.140
9	3.102	3.073	3.048	3.025	3.006	2.989	2.974	2.960	2.948	2.936	2.925
10	2.943	2.913	2.887	2.865	2.845	2.828	2.812	2.798	2.785	2.774	2.764
11	2.818	2.788	2.761	2.739	2.719	2.701	2.685	2.671	2.658	2.646	2.636
12	2.717	2.687	2.660	2.637	2.617	2.599	2.583	2.568	2.555	2.544	2.533
13	2.635	2.604	2.577	2.554	2.533	2.515	2.499	2.484	2.471	2.459	2.448
14	2.565	2.534	2.507	2.484	2.463	2.445	2.428	2.413	2.400	2.388	2.377
15	2.507	2.475	2.448	2.424	2.403	2.385	2.368	2.353	2.340	2.328	2.316
16	2.456	2.425	2.397	2.373	2.352	2.333	2.317	2.302	2.288	2.276	2.264
17	2.413	2.381	2.353	2.329	2.308	2.289	2.272	2.257	2.243	2.230	2.219
18	2.374	2.342	2.314	2.290	2.269	2.250	2.233	2.217	2.203	2.191	2.179
19	2.340	2.308	2.280	2.256	2.234	2.215	2.198	2.182	2.168	2.155	2.144
20	2.310	2.278	2.250	2.225	2.203	2.184	2.167	2.151	2.137	2.124	2.112
21	2.283	2.250	2.222	2.197	2.176	2.156	2.139	2.123	2.109	2.096	2.084
22	2.259	2.226	2.198	2.173	2.151	2.131	2.114	2.098	2.084	2.071	2.059
23	2.236	2.204	2.175	2.150	2.128	2.109	2.091	2.075	2.061	2.048	2.036
24	2.216	2.183	2.155	2.130	2.108	2.088	2.070	2.054	2.040	2.027	2.015
25	2.198	2.165	2.136	2.111	2.089	2.069	2.051	2.035	2.021	2.007	1.995
26	2.181	2.148	2.119	2.094	2.072	2.052	2.034	2.018	2.003	1.990	1.978
27	2.166	2.132	2.103	2.078	2.056	2.036	2.018	2.002	1.987	1.974	1.961
28	2.151	2.118	2.089	2.064	2.041	2.021	2.003	1.987	1.972	1.959	1.946
35	2.075	2.041	2.012	1.986	1.963	1.942	1.924	1.907	1.892	1.878	1.866
40	2.038	2.003	1.974	1.948	1.924	1.904	1.885	1.868	1.853	1.839	1.826
50	1.986	1.952	1.921	1.895	1.871	1.850	1.831	1.814	1.798	1.784	1.771
60	1.952	1.917	1.887	1.860	1.836	1.815	1.796	1.778	1.763	1.748	1.735
70	1.928	1.893	1.863	1.836	1.812	1.790	1.771	1.753	1.737	1.722	1.709
80	1.910	1.875	1.845	1.817	1.793	1.772	1.752	1.734	1.718	1.703	1.689
90	1.897	1.861	1.830	1.803	1.779	1.757	1.737	1.720	1.703	1.688	1.675
100	1.886	1.850	1.819	1.792	1.768	1.746	1.726	1.708	1.691	1.676	1.663
200	1.837	1.801	1.769	1.742	1.717	1.694	1.674	1.656	1.639	1.623	1.609
300	1.821	1.785	1.753	1.725	1.700	1.677	1.657	1.638	1.621	1.606	1.591
400	1.813	1.776	1.745	1.717	1.691	1.669	1.648	1.630	1.613	1.597	1.582
500	1.806	1.772	1.740	1.712	1.686	1.664	1.643	1.625	1.607	1.592	1.577
1000	1.798	1.762	1.730	1.702	1.676	1.654	1.633	1.614	1.597	1.581	1.566

$dk_1 \backslash dk_2$	22	23	24	25	26	27	28	29	30	35	40
1	248.579	248.823	249.052	249.260	249.453	249.631	249.798	249.951	250.096	250.693	251.144
2	19.430	19.452	19.454	19.436	19.437	19.459	19.460	19.461	19.463	19.467	19.471
3	8.648	8.643	8.638	8.634	8.630	8.626	8.623	8.620	8.617	8.604	8.594
4	5.787	5.781	5.774	5.769	5.763	5.759	5.754	5.750	5.746	5.729	5.717
5	4.541	4.534	4.527	4.521	4.515	4.510	4.505	4.500	4.496	4.478	4.464
6	3.856	3.849	3.841	3.835	3.829	3.823	3.818	3.813	3.808	3.789	3.774
7	3.426	3.418	3.410	3.404	3.397	3.391	3.386	3.381	3.376	3.356	3.340
8	3.131	3.123	3.115	3.108	3.102	3.095	3.090	3.084	3.079	3.059	3.043
9	2.917	2.908	2.900	2.893	2.886	2.880	2.874	2.869	2.864	2.842	2.826
10	2.754	2.745	2.737	2.730	2.723	2.716	2.710	2.705	2.700	2.678	2.661
11	2.626	2.617	2.609	2.601	2.594	2.588	2.582	2.576	2.570	2.548	2.531
12	2.523	2.514	2.505	2.498	2.491	2.484	2.478	2.472	2.466	2.443	2.426
13	2.438	2.429	2.420	2.412	2.405	2.398	2.392	2.386	2.380	2.357	2.339
14	2.367	2.357	2.349	2.341	2.333	2.326	2.320	2.314	2.308	2.284	2.266
15	2.306	2.297	2.288	2.280	2.272	2.265	2.259	2.253	2.247	2.223	2.204
16	2.254	2.244	2.235	2.227	2.220	2.212	2.206	2.200	2.194	2.169	2.151
17	2.208	2.199	2.190	2.181	2.174	2.167	2.160	2.154	2.148	2.123	2.104
18	2.168	2.159	2.150	2.141	2.134	2.126	2.119	2.113	2.107	2.082	2.063
19	2.133	2.123	2.114	2.106	2.098	2.090	2.084	2.077	2.071	2.046	2.026
20	2.102	2.092	2.082	2.074	2.066	2.059	2.052	2.045	2.039	2.011	1.994
21	2.073	2.063	2.054	2.045	2.037	2.030	2.023	2.016	2.010	1.984	1.965
22	2.048	2.038	2.028	2.020	2.012	2.004	1.997	1.990	1.984	1.958	1.938
23	2.025	2.014	2.005	1.996	1.988	1.981	1.973	1.967	1.961	1.934	1.914
24	2.003	1.993	1.984	1.975	1.967	1.959	1.952	1.945	1.939	1.912	1.892
25	1.984	1.974	1.964	1.955	1.947	1.939	1.932	1.926	1.919	1.892	1.872
26	1.966	1.956	1.946	1.938	1.929	1.921	1.914	1.907	1.901	1.874	1.853
27	1.950	1.940	1.930	1.921	1.913	1.905	1.898	1.891	1.884	1.857	1.836
28	1.935	1.924	1.915	1.906	1.897	1.889	1.882	1.875	1.869	1.841	1.820
35	1.854	1.843	1.833	1.824	1.815	1.807	1.799	1.792	1.786	1.757	1.735
40	1.814	1.803	1.793	1.783	1.775	1.766	1.759	1.751	1.744	1.715	1.693
50	1.759	1.748	1.737	1.727	1.718	1.710	1.702	1.694	1.687	1.657	1.634
60	1.722	1.711	1.700	1.690	1.681	1.672	1.664	1.656	1.649	1.618	1.594
70	1.696	1.685	1.674	1.664	1.654	1.646	1.637	1.629	1.622	1.591	1.566
80	1.677	1.665	1.654	1.644	1.634	1.626	1.617	1.609	1.602	1.570	1.545
90	1.662	1.650	1.639	1.629	1.619	1.610	1.601	1.593	1.586	1.554	1.528
100	1.650	1.638	1.627	1.616	1.607	1.598	1.589	1.581	1.573	1.541	1.515
200	1.596	1.583	1.572	1.561	1.551	1.542	1.533	1.524	1.516	1.482	1.455
300	1.578	1.565	1.554	1.543	1.533	1.523	1.514	1.505	1.497	1.463	1.435
400	1.569	1.556	1.545	1.534	1.523	1.514	1.505	1.496	1.488	1.453	1.425
500	1.563	1.551	1.539	1.528	1.518	1.508	1.499	1.490	1.482	1.447	1.419
1000	1.553	1.540	1.528	1.517	1.507	1.497	1.488	1.479	1.471	1.435	1.406

APPENDIX XXI**DOCUMENTATION****CONTROL CLASS**

Figure 1: Students did the pre-test carefully



Figure 2: Students wrote the text



Figure 3: Students did the post-test carefully

EXPERIMENTAL CLASS





Figure 4: Students did the pre test carefully







Figure 5: The researched gave treatment to the students



Figure 6: Students did the post test carefully

APPENDIX XXII

THE RESULT OF PRE-TEST IN

EXPERIMENTAL CLASS

APPENDIX XXIII

THE RESULT OF POST-TEST IN EXPERIMENTAL CLASS

APPENDIX XXIV

THE RESULT OF PRE-TEST IN CONTROL CLASS

APPENDIX XXV

THE RESULT OF POST-TEST IN CONTROL

CLASS