THE EFFECT OF USING THE MIND MAPPING TECHNIQUE TOWARDS STUDENTS' WRITING ABILITY AT ELEVENTH GRADE OF SENIOR HIGH SCHOOL NUMBER 11 JAMBI CITY

A THESIS

Submitted as a Partial Fulfillment of the Requirement for the

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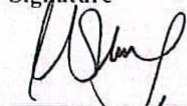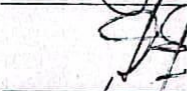| Dean of Faculty of	Head English Language
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ADMISSION

This research entitled "The Effect of Using Mind Mapping Technique towards Students' Writing Ability at Eleventh Grade of Senior High School Number 11 Jambi City" has been defended before the examiners of English Education Study Program, Faculty of Teacher Training and Education, University of Batanghari Jambi, on August 9, 2023.

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DECLARATION

I hereby announce, this research entitled "The Effect of Using Mind Mapping Technique towards Students' Writing Ability at eleventh Grade of Senior High School Number 11 Jambi City" is my original work. I am fully aware that I have taken some statements as well as theories from several experts and journals, however they are properly acknowledge in the text.

Jambi, August 14th 2023

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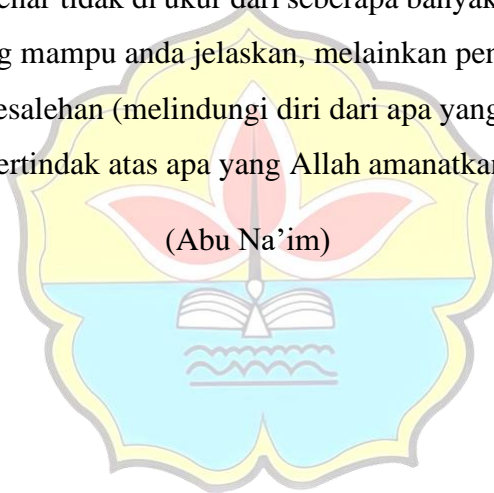
DEDICATION

I will not complete this thesis without the help of people that never stop to give me their love, attention, guidance, and patience. I dedicated this thesis to….

- My beloved father Nasrun and my beloved mother Darmalina who had brought me up, taught, and guided me with their truly love and affection. Their support lead me be able to finish this thesis.

- My beloved sisters Novita eka paradina, Rizkia dwi oktadini, and Razita febria neva. For their words of encouragement to me which made me excited to complete this research

- All of my family who always cheer me up when finishing this thesis.
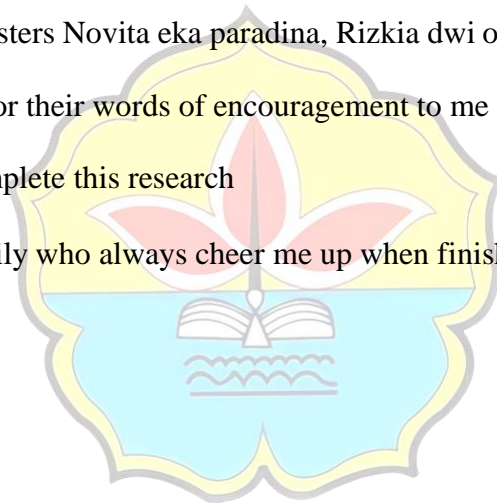
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Alhamdulillahhirobbil' alamin. All praise and gratitude from the researcher goes to Allah SWT, because of mercy and grace the researcher can finish this thesis. With greetings and prayers, the researcher does not forget to say to the Prophet Muhammad SAW, who has given Muslims guidance in this world and the hereafter. This thesis was created as a requirement for obtaining a bachelor's degree with the title "The Effect of using Mind Mapping Techniques Towards students' Writing Ability at Eleventh Grade of Senior High School No. 11 Jambi City". The researcher realizes that this thesis would not be finished without the help, advice, and guidance of people who care about the researcher. Therefore, on this opportunity the researcher would like to express gratitude and appreciation to the following parties and their contributions:

1. My beloved parents, Nasrun and Darmalina, for their love, patience, support, affection, wisdom, and for always helping me achieve my highest dreams. My beloved sisters, Novita Eka Paradina, Rizkia Dwi Oktadini, and Razita Febria Neva, for the motivation and support that always make researcher enthusiastic about completing this thesis.

2. Prof. Dr. Herri, M.B.A., as the Rector of University of Batanghari Jambi.

3. Dr. H. Abdoel Gafar, S.Pd., M.Pd as the Dean of Teacher Training and Education Faculty of Batanghari University.

The researcher realizes that this thesis is still far from perfection. Criticism and suggestions for improving this thesis are highly appreciated. The researcher hopes this thesis will contribute to the advancement of education. Aamiin

Jambi, August 9th 2023

The Researcher

Windi Tri Maiharani

ABSTRACT

Maiharani, Windi T. 2023. The Effect of Using Mind Mapping Technique toward Students' Writing ability At Eleventh Grade Of Senior High School Number 11 Jambi City. Thesis Language Education, Faculty of Teacher training and Education Sciences, Batanghari University. The First Advisor Dra. Hj. Wennyta, M.Pd. The Second Advisor Kartika dewi, M,Pd.

The aim of the research is to see whether using mind mapping techniques improves students' writing abilities. This research uses a quantitative approach with a quasi-experimental methodology. A pre-test and post-test are used to collect data in this design. This research took place at SMAN 11 Jambi City. The researcher used a simple random sampling strategy to select students for the sample. Students in XI MIPA 2 were taught using the mind mapping technique, while students in XI MIPA 1 were not. The data gathered for this research was analyzed using the SPSS version 21 application. To collect data, the researcher gave a writing exam, which consisted of writing an explanatory text. Students in the experimental class completed a writing test using a mind mapping technique, whereas students in the control class did not use a mind mapping technique. The data in this research is analyzed using normality, homogeneity, and t tests. The following are the research's findings: (1) Normality test results for the experimental class with sig. 0.752 > 0.05 and the control class with sig. 0.510 > 0.05 show that the research's normality test is normally distributed. (2) The homogeneity test findings of the experimental class with sig. 0.678 > 0.05 and the control class with sig. 0.457 > 0.05 in this research are homogeneous. (3) The t-test results for both classes with a sig. 0.000 0.05 indicate that using mind mapping techniques has an effect on students' writing results.

Keywords: *Mind Mapping Technique, Writing Ability*

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CHAPTER I

INTRODUCTION

1.1. Background of The Problem

Education is a deliberate and organized endeavor to provide learning, a learning environment, and a learning process in order for students to actively develop their potential. This is stated in Article 3 of the SISDIKNAS Law No. 20 of 2003 regulating the national education system: In the context of educating the nation's life, national education functions to develop capabilities and form dignified national character and civilization; it aims to develop the potential of students to become human beings who have faith and are devoted to God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens.

An English lesson is one of the lessons that can fulfill the purpose of education under Law No. 20 of 2003 because English has become a highly important way of communicating in the world due to its status as an international language. Aside from that, mastery of the English language can boost the cognitive capacity of its users. This was explained by Abbot (2007), who stated that the ability to communicate using more than one language can actually improve the ability of the brain and monitor the brain system much better. It cannot be denied that mastery of the English language is one way to develop students' potential in educating the future of the nation. Based on this, Indonesia, as a member of the world's community, recognizes the significance of acquiring

English. As a result, learning English is a crucial lesson for students because it can increase their knowledge of language abilities.

According Field (2000) there are four technical abilities that must be learned if students want to master English: Listening, Speaking, Reading, and Writing. And writing is considered one of the most important abilities in learning English. Based on Harmer, (1998) writing is important language ability, just the same as speaking, listening, and reading. Writing is also an ability that requires practice in order to communicate ideas, thoughts, and memories in the form of sentences, paragraphs, or essays. In the context of learning writing abilities, to master writing lessons optimally and accomplish the intended goals, learning techniques that teachers could use to help students understand writing lessons is required. Techniques must be diversified and not monotonous in order to meet the demands and difficulties of students.

Based on the observations of researchers while implementing teaching practice for two months at SMAN 11 Jambi while teaching in class eleventh, based on the teacher's lesson plans using a scientific approach method with a question-answer technique Unfortunately, using the question-answer technique is incompatible with learning to write. Students become passive in the question-answer technique for fear of giving the wrong answer. As a result, the teacher still dominates the question-answer technique and students become less confident and innovative in their learning. Another weakness discovered by the researchers was that the knowledge provided to students was fundamental, which meant that it was

mostly centered on textbooks, so the question-answer technique utilized solely focused on books, making students less critical in their thinking. The outcomes of writing lesson scores acquired by students who are still below average in the last three years demonstrate this. Whereas in ideal writing learning, according to Jones (2005), students are challenged to explore more about the knowledge they have, learning to write requires students to learn to sort things logically and classify things to be written, and if it is repeated, it will make students smarter in understanding something, and learning to write trains students to make a diagnosis of the problem. This is where students must be able to solve the problem. As a result, the results produced by students in learning to write can cause them to develop intellect, initiative, and creativity, create self-confidence and courage, and motivate them to have a desire to know, which can boost their intelligence.

To overcome the problems above, the solution that can be used is to equip students with interesting learning techniques. Learning techniques is one way to improve their writing abilities. The mind map technique is one of the learning techniques that teachers can use because it has the potential to reduce student boredom when learning to write. Based on Buzan (2010), using mind mapping techniques will help students optimize the work of their right and left brains. The mind mapping technique is a creative style of thinking and the best answer for students who want to organize and grasp a range of knowledge. Because students are no longer forced to write down books and then memorize them, this technique sharpens their analytical and logical abilities. Furthermore, the mind mapping technique encourages students creative sides through the use of curved lines,

colors, and images. Capable of improving students' capacity to imagine, remember, concentrate, and solve issues. Mind mapping techniques will also teach students how to record and compile key information from a concept or major idea they are studying.

Researchers chose this title for various reasons, such as the desire to determine whether using mind mapping techniques is beneficial to students' writing abilities, According to the statements above, the researcher intends to identify those problems and conduct the research entitled **"The Effect of Using Mind Mapping Technique towards Student's Writing Ability at Eleventh Grade of Senior High School Number 11 Jambi City"**

1.2. Identification of the Problem

Based on the description given previously, the researcher tries to describe the difficulties as follows:

1. Students are struggled to concentrate on coming up with new ideas and appeared uncertain about how to structure a paragraph.

2. Many students make mistakes when writing a text. Their text are disorganized, incoherent, and contains mistakes in vocabulary, grammar, and spelling

1.3. Limitation of the Problem

Based on the identification above, the researcher limited the study at eleventh grade of senior high school number 11 Jambi City in student's writing ability to write explanation text using mind mapping technique.

1.4. Formulation of the Research

Based on the background describe above, the problem of the research: "Is there any significant effect of using mind mapping technique toward student's writing ability at eleventh grade of Senior High School Number 11 Jambi City?"

1.5. Objective of the Research

The main objective of this research, based on the research question above, is to determine whether the mind mapping technique can improve students' writing skills.

1.6. The Significant of the Research

Hopefully, the importance of this research can help student and researchers in the following ways:

1. For students who are the subject of this research, it is expected that the results of this research will give them an advantage for them to learning English especially learning writing ability and they will be able to solve their difficulty in writing and become more aware of their writing abilities.

2. For English teachers, in order to enhance their capability to teach explanation text. For an alternative way of teaching, teacher can use mind mapping technique for teaching texts.

3. For other researchers who have the same interest in mind mapping technique, This research aims to provide references or knowledge for future research, and the researcher genuinely wishes that other

researchers will examine, rewrite, restructuring, or adapt this research and create research for different scales and objects.

1.7. Definition of Key Terms

1. The Mind Mapping

    The Mind Mapping Strategy instructs students to locate superordinate concepts on paper and afterwards link subordinate concepts as appropriate Buzan (2010). The researcher defines mind mapping as a visual organizer in which students arrange their ideas as well as the lexical and grammatical knowledge necessary to communicate those ideas.

2. The Explanation Text

    Explanatory text explains how a phenomenon can occur and explains in more detail using scientific term. Explanatory texts are essential to acquiring and maintaining knowledge. And make it less complicated for someone to comprehend a phenomenon of nature.

3. Writing

    Writing is the activity of channeling the ideas in your head into a systematically arranged piece of writing. In producing a written work, one must be able to master the senses, such as seeing and hearing

1.8.   Basic Assumption

1. Mind mapping technique is regarded as the most effective technique for teaching writing.

2. Using mind mapping techniques can help students develop their abilities to learn English, particularly their writing skills.
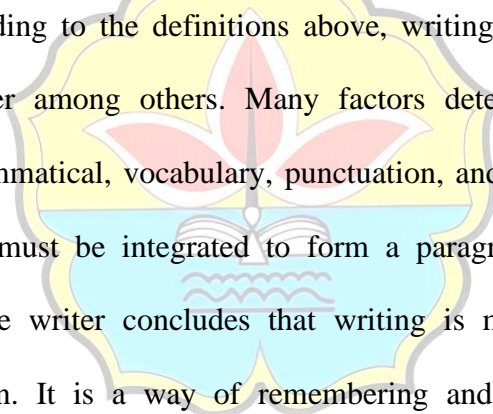
CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Definition of Writing

A language can be used for a variety of purposes. As a result, it serves various purposes. In addition, language is divided into two main abilities: skills in absorbing a new language and skills in making a language. Writing is one of the useful skills that must be learned when learning to use a language. Because writing skills are important for optimizing informative abilities when learning a language, students learn and acquire language through written and spoken aspects to improve their communicative competence. Based on Jozsef (2001) Writing is a complicated procedure that includes creating ideas, as well as capturing knowledge and expertise on the subject under discussion. In the communication process, students should ideally understand the rules for having conversations with others, collecting information, and communicating about the language itself. Hylad (2003) states the definition of writing as a product of grammar and vocabulary, and writing development results from imitation and manipulation of models provided by the teacher. Many people seem to believe that writing is an extension of grammatical tools for reinforcing language patterns and testing students' ability to form well-functioning sentences. Based on Celce (1991) writing is defined as the ability to express one's perception in wring in a language that is not their mother tongue or native language. This indicates that

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creating words is a method when we represent ourselves in the form of words, because the process of writing reflects the things that is in our minds. Based on Nunan (2015) for students, understanding how to write is a challenging ability. In accordance with Maggie Sokolik's view, to write texts that have the potential to communicate effectively, an individual must go through an emotional process. Students who experience emotional process are usually students who have difficulty expressing their ideas in a piece of writing, and as a result, these students become reluctant to do their assignment in writing.

According to the definitions above, writing is the most difficult skill to master among others. Many factors determine good writing, including grammatical, vocabulary, punctuation, and spelling knowledge, all of which must be integrated to form a paragraph. From the ideas previously, the writer concludes that writing is more than a medium communication. It is a way of remembering and a way of thinking. Because of that, writing is not easy. It needs a hard work. In writing we have to produce words, phrase, sentences, and paragraph at the same time. It is a way of learning. None of us can write much of interest without first thinking, probing, observing, asking question, experimenting, and reading.

2.2 The Process of Writing

According to Abbott (2007) Writing and reading are similar skills that may be learned the two procedures happen in sequence. Spivey (2006) states that, this process consists of various steps that help children into beginning of writing to the completion of making a paragraph. These steps are used by teachers to provide structure and continuity in all kinds of writing.

The step of writing process:

1. Prewriting

   Students brainstorm to generate writing ideas. They use charts, story webs, and graphic organizers to help them improve a word list for writing, decide on the type of writing, audience, and purpose for writing.

2. Rough Draft

   Students wrote down their ideas. At this point, they write without much regard for punctuation, grammar, or neatness. Some teachers might call this a sloppy copy or a rough draft. The purpose of the rough draft is for the student to concentrate on his or her ideas and get them down on paper without being distracted or concerned about making mistakes in grammar, capitalization, punctuation, or paragraph structure.

3. Peer Editing

Classmates share their rough drafts and make suggestions for improvement to their classmates. They help each other understand the story by asking questions. They search for more appropriate phrases to describe their ideas and discuss strategies to make the writing easier to understand

4. Revising

The student incorporates or clarifies details suggested by classmates. They make an effort to improve their writing on their own. At this point, the teacher intervenes and provides feedback.

5. Editing

All grammar and spelling errors are corrected by the student in collaboration with the teacher and/or peers.

6. Final Draft

Students should make a copy of their writing with all editing corrections and then discuss this final draft with the teacher. At this point, the teacher makes the final suggestions for improvement.
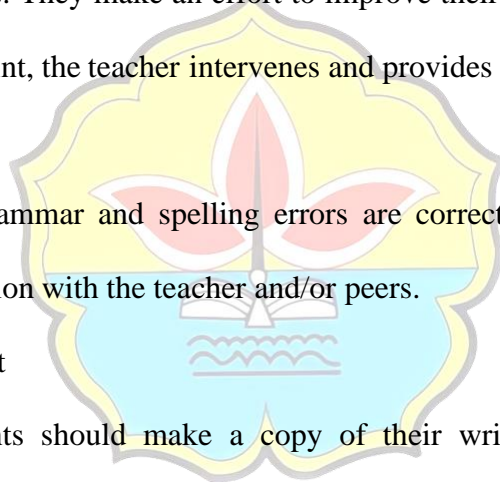
2.3   Explanation Text

2.3.1   Definition of Explanation Text

An Explanatory text is written to explain how and why something in the world occurs. According to Kemendikbud (2017) explanation text is a non-fiction text that describes how or why something happens. Which can be interpreted as meaning that
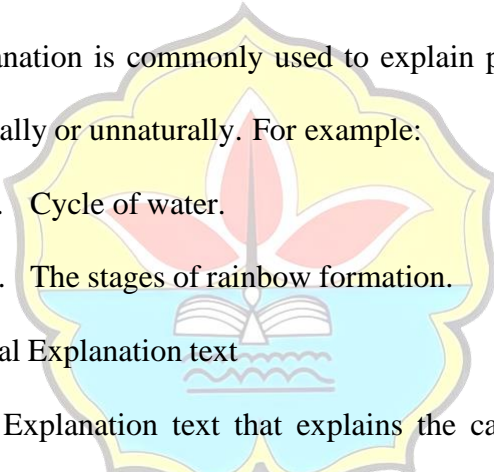
explanation text is about a phenomenon that occurs in our environment.

2.3.2 Types of Explanation Text

Kemendikbud (2017) states that there are two types of explanation text:

1. Sequential Explanation text

    Explanation text that explains the stages of occurrence of a phenomenon sequentially from beginning to end. This sequential explanation is commonly used to explain phenomena that occur naturally or unnaturally. For example:

    a. Cycle of water.

    b. The stages of rainbow formation.

2. Causal Explanation text

    Explanation text that explains the causes of phenomenon that occurs on earth. Typically, explanatory causal texts are used to explain the causes of natural and unnatural phenomena. For example:

    a. What causes earthquakes?

    b. What causes colonization in Indonesia?

2.3.3 Generic Structure of Explanation Text

1. General statement is general explanation that provides readers with background information necessary to comprehend the text

2. Sequence explanation is a paragraph that explains why the phenomenon can occur and explains the stages of the phenomenon. Sequence explanation can be several paragraphs

3. Concluding statement contains a concluding paragraph that summarizes all of the information provided in the previous paragraphs.

2.3.4 Language Features of Explanation Text

1. Using simple present tense.

2. Using action verbs, e.g. do, make, create, put, etc.

3. Using passive voice.

4. Using conjunction, e.g. first, then, finally, as a result, after, etc.

5. Using technical terms, e.g. rice (oryza sativa).

2.3.5 Example of Explanation Text

How Hurricane Can Happen?

General Statement: A hurricane is a strong gust of wind with whirlwinds reaching speeds of up to 120 km/h or more. A hurricane can also be called a hurricane that is very strong. How do hurricanes form?

Sequence Explanation: Typhoons form in oceans of hot temperatures. Hot air, of course, will quickly evaporate. The amount of water vapor that comes from the oceans is very large. The water vapor then rises and forms cumulonimbus clouds. Within this pile of clouds, there was an extremely powerful whirlwind. The vortex of the wind will get stronger, so that it spins and forms a typhoon.

Sequence Explanation: Well, hurricanes usually occur accompanied by heavy rain. Why did it happen? Typhoons are formed from a collection of clouds. Inside the typhoon there are lots of overcast clouds. These cloudy clouds will bring down heavy rain. When a hurricane occurs, the sky will be covered with cloudy clouds.

Concluding Statement: Typhoons often knock down houses and trees, and can even blow away anything that is nearby. Therefore, when a hurricane occurs, it is necessary to take disaster preparedness measures, such as taking shelter in a sturdy building, avoiding tall buildings, such as trees, electricity poles, pamphlets, and the like.

2.4.   The Mind Mapping Technique

Backwell (2009) emphasizes that mind mapping is a brainstorming technique that relates to the pre-writing classification of the writing process and is a note-taking technique where the main topics are subdivided into sub-topics and then written in the branch structure. In mind mapping, however, any idea can be linked to any other. When creating a mind map, free-form, spontaneous thinking is required, and the primary objective of mind mapping is to find creative associations between ideas. Buzan (2006) went on to explain that mind mapping is a storage system, with draw all data, and exceptional access to a giant library, which actually exists in the amazing brain, because mind mapping helps collate and store as much information as desired, and group in a natural way.

Mind mapping has been used as a teaching technique for various language skills, especially writing abilities, because mind mapping allows the brain to use all the images and engage in directed design, which can make students write paragraphs or essays in an orderly and more structured manner. According to Yinghui (2022) Mind mapping, as a visualization technique, not only represents the main theme through

connections, but also allows the creative development of associative connections between ideas. Therefore, mind mapping is important, efficient, and useful for students to build their understanding in writing, especially paragraphs and essays.

2.5 Types of Mind Mapping Technique

Based on Buzan (1984) There are three types of mind mapping technique:

1. Radial Mind Map

   The central topic is the main idea, with supporting topics on the left, right, above, and below the main idea.
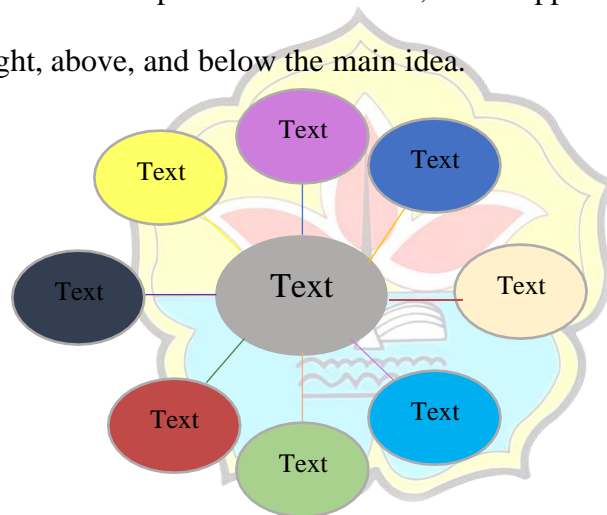
2. Right Column Mind Map

   With the topic's main idea on the right and supporting topics following
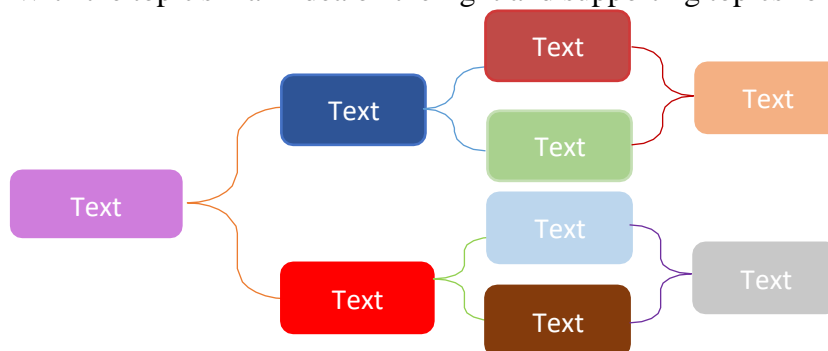
3. Left Column Mind Map

   With the topic's main idea on the left and supporting topics following
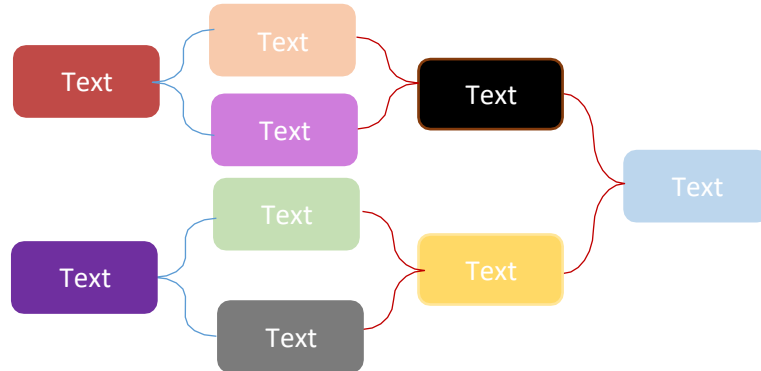
   The researcher chose a radial mind map for this research because it is suitable for explanation text material with main ideas and supporting points that strengthen the main ideas.

2.6   The Advantage and Disadvantage of Mind Mapping technique

2.6.1 The Advantage of Mind Mapping

   Chik, Plimmer and Hosking (2007) stated. There are several benefits of using of Mind Mapping for self-development:

   1. Saves time by only recording relevant.

   2. While passively developing an idea of organizational structure, associations between significant points of knowledge are formed.

   3. Because mind maps are effective at displaying relevant keywords linked to a specific topic, evaluating mind maps takes less time than reviewing written notes.

4. The processing of information by the brain is helped by providing a visually appealing background.

2.6.2 The Disadvantage of Using Mind Mapping

Based on Buzan (1994) there are several disadvantages when using mind mapping technique:

1. It is challenging to create a great mind map for a completely new subject or topic. It usually requires some preparation.

2. Information, then taking linear notations may be better choice.

3. If not intended, creating a mind map can be upsetting due to a lack of space, creative thinking, and so on.

4. Mind mapping does not always more straightforward than able to identify notes.

2.7 The Process of Making Mind Mapping technique

Buzan (2006) stated. In making Mind mapping very simple:

1. Use a sheet of blank paper with no lines and some colored pens. Make certain that the paper is placed sideways.

2. Create an image in the middle of the paper that summarizes the main topic. The image represents the main topic.

3. Make a few thick curved lines able to connect from the image in the center of the paper, one for each of the main ideas on the subject. The main branches represent the most important sub-topics.

4. Name each of the above ideas and, if wanted, make small drawings about each of these ideas to participate both sides of the brain. Every

word in Mind Mapping will be highlighted. This is because words are important, and adding an underscore, as in frequent notes, demonstrates the level of importance.

5. Another link can be drawn from every existing idea, which spreads like tree branches. Add your thoughts to each of these concepts.

2.8   The Previous Study

The researcher will review some previous studies relate to this research in this chapter. The researcher discovered three related studies. The first is the research was conducted by Syafriza Ulfa (2016). The title is "The effect of using mind mapping technique on writing procedure text of eleventh grade students of SMAN 1 tanjung pura in academic year 2016/2017". This research investigates the impact of the mind mapping technique on students' ability to write procedure text. The purpose of this research was to determine whether the mind mapping technique had a significant effect on writing procedure text. It was carried out through experimental research. The experimental group was taught using mind mapping, while the control group was taught using lecturing. The data collection instrument was a writing test. The t-test formula was used to analyze the data. It was discovered that observed (5.98) was greater than t-table (1.99). It means that using mind mapping technique had a significant effect on students writing procedure text at SMAN 1 Tanjung Pura. The difference between the previous research and this research, according to the research above, is in the material used. In previous

research used a procedure text whereas in this research, researcher used explanation text. However, the similarities between the previous research and this research are that they both use mind mapping as teaching materials.

The second research is the research was conducted by Nurmala Basri and Syamsia (2020). The title is "The Effect of Applying Mind Mapping Method in Writing Descriptive Text". The mind mapping method is applied to see how the method influences writing student description texts. This study aims to identify the effect of the mind mapping method on writing descriptive texts for students of SMK Muhammadiyah Tidore Kepulauan. The subjects are students of class XI for the 2020/2021 school year. This research uses a quantitative design. The instrument used by researchers is a test. The analysis technique used to measure student work is by using descriptive text rubrics. The implementation of learning to write descriptive text using the mind mapping method in class XI students is carried out effectively, smoothly, and thoroughly, which can be seen from the seriousness of the students in participating in learning. The mind mapping method has a positive influence on writing the descriptive text for class XI students of SMK Muhammadiyah Tidore Kepulauan. This can be seen in the learning outcomes that the scores of the results of writing the descriptive text of students using the mind mapping method have increased between the pre-test and post-test scores, the pre-test average score is 51,3 while the post-

test average score is 90,6. The difference between the previous research and this research, according to the research above, is in the material used. In previous research used a descriptive text whereas in this research, researcher used explanation text. However, the similarities between the previous research and this research are that they both use mind mapping as teaching materials.

The third research is the research was conducted by Dr. Hadeel Ali Saed and Dr. Hamzeh Ali AL-Omari (2014). The title is "The Effectiveness of a Proposed Program Based on a Mind Mapping Strategy in Developing the Writing Achievement of Eleventh Grade EFL Students in Jordan and Their Attitudes towards Writing". The main objective of this quasi-experimental study was to investigate the effectiveness of a proposed mind mapping program in developing first-year students' writing achievement skills and to evaluate the function that this strategy may play in promoting students' attitudes toward writing in Jordan. The study's subjects were 91 female students from the eleventh grade at Sands National Academy, Amman Second Directorate of Education, during the first semester of the academic year 2013/2014. The experimental and control groups were assigned at random. Students in the treatment group were taught writing skills using the mind mapping strategy, whereas students in the control group were taught writing skills using the traditional method. The different groups (experimental and control) sat for the writing achievement post-test and filled out the attitudinal

questionnaire at the end of the experiment. To measure statistical differences in the mean scores of study subjects, multivariate analysis of covariance (MANCOVA) was used. The study's findings revealed statistically significant differences at (=0.05). The mind mapping strategy can also be integrated into Jordan's EFL curriculum to help students develop positive attitudes toward writing. Teachers should also use mind mapping to increase students' interest and motivation to write more frequently. According to the research above, the difference between the previous research and researcher's research is in the sample of the research. The sample in the previous research was using MANCOVA, whereas this research used T-test. However, the similarities between the previous research and this research are that they both use mind mapping as teaching materials.

2.9   Research Framework

In this study, the researcher concentrates on the impact of using mind mapping technique on students' writing abilities. The first method of research is to give pre-test to experimental and control groups. Second, the students wrote their answers on the writing test sheet. The researcher then only gives the experimental group the treatment, which is a mind mapping technique. Following that, the researcher gives both the experimental and control groups a post-test. Finally, the researcher calculates the writing tests of all the students to determine the effect of using a mind mapping technique on the writing ability of the students. The framework of this research is described in the following scheme:

Figure 1: Research Framework

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        ┌─────────────────────────┐
        │  The effect of using mind│
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                    │
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        ┌─────────────────────────┐
        │         Pretest          │
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          ▼                   ▼
 ┌──────────────────┐ ┌──────────────────┐
 │ Experiment Class:│ │ Control Class:   │
 │ using mind mapping│ │ without using    │
 │                  │ │ mind mapping     │
 └──────────────────┘ └──────────────────┘
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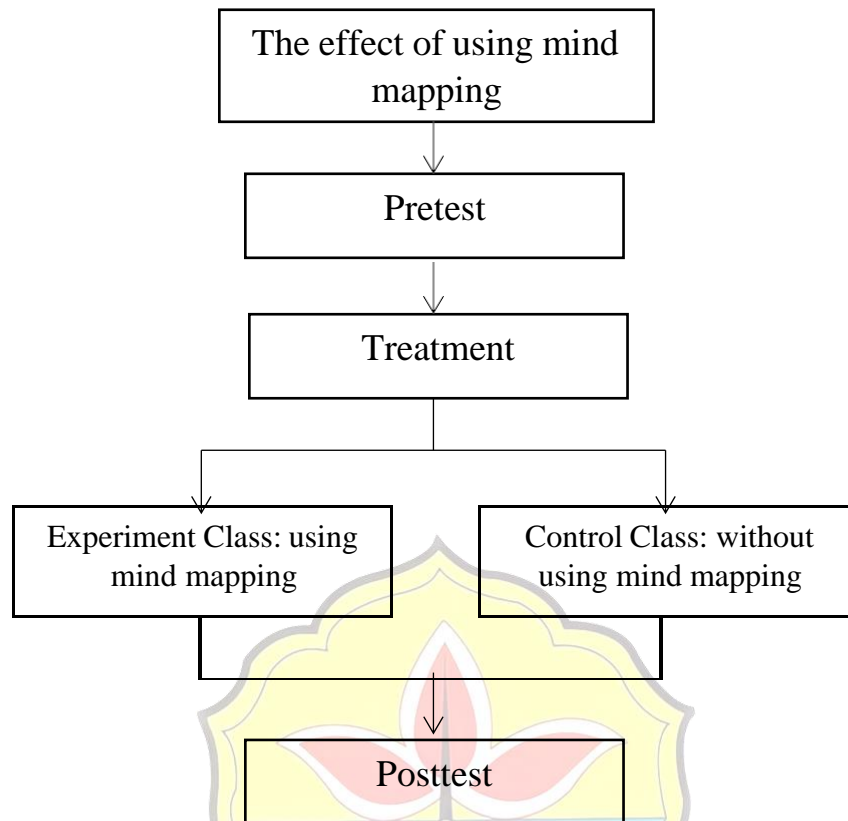
2.10   Hypothesis

Gay (2012) stated a hypothesis is a researcher's prediction of the research findings. Then the hypothesis in this research can be formulated as:

Ha: There is a significant effect of using mind mapping technique toward students' ability in writing at the eleventh grade of senior high school number 11 Jambi city.

Ho: There is no significant effect of using mind mapping technique toward students' ability in writing at the eleventh grade of senior high school number 11 Jambi city.

CHAPTER III

RESEARCH METHOD

3.1 Research Design

In this research, the researcher chooses a quantitative research methodology. Based on Dornyei (2007) quantitative research involves data collection procedures that results primarily in numerical data which is then analyzed primarily by statistical method. It means that the data from quantitative research in the form of number analyzed by using statistical formula.

This research used a quasi-experimental design. Nunan (1992) stated that quasi-experimental design is defined as a quantitative research that includes both pre-test and post-test with experiment and control groups but no random assignment of subjects. This design involves group consist two class: control class and experiment class that has both pretest and posttest and experimental and control groups. A pre-test is given before treatment, and a post-test is given after that to assess the effectiveness of the treatment. The students in the experimental class was taught using mind mapping technique during the writing process as the research's treatment it aims to know whether there is significant development before and after using mind mapping technique and to know whether by using mind mapping technique can improve writing skill. For the students in control class was taught using a question and answer technique, the application of question and answer technique in the control group was intended to determine whether there are differences in writing learning between mind mapping

techniques and conventional method. This design can be seen as follows:

(Adapted from Gay, et.al 2006).

Table 1

Design of the Research (quasi-experimental)

Group	Pre Test	Treatment	Post Test
Experimental	T_1	X	T_2
Control	T_1	-	T_2

Note:

T_1 : PreTest

T_2 : Post Test

X : Treatment (mind mapping technique)
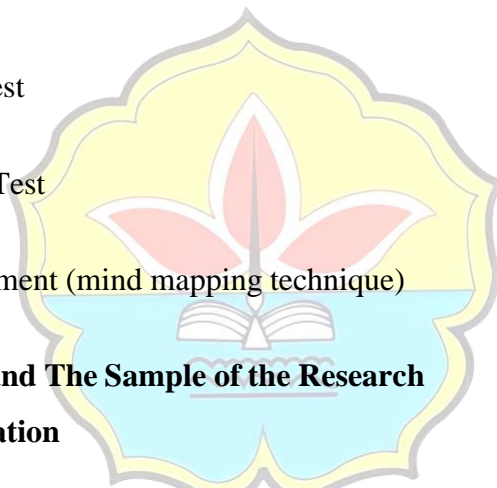
3.2 The Population and The Sample of the Research

3.2.1 Population

According to Creswell (2012) defines population as a group of individuals who share one characteristic that distinguishes them from other groups. Based on Yusuf (2017) population is a domain of generalization comprised of objects/subjects exhibiting specific qualities and characteristics determined and inferred by the researchers questioned.

The Researcher chooses the eleventh grade students at senior high school No. 11 Jambi city in the academic year 2023. There are 8 Classes in the eleventh grade which consist of 31-36 students each class.

Table 2

Population of the Research

No	Class	Gender		Total Number
		Male	Female	
1	XI MIPA 1	19	17	36
2	XI MIPA 2	17	19	36
3	XI MIPA 3	19	15	34
4	XI MIPA 4	18	18	36
5	XI IPS 1	14	19	33
6	XI IPS 2	12	21	33
7	XI IPS 3	15	18	33
8	XI IPS 4	16	15	31
Total		**130**	**142**	**272**

(Source: administration of Senior High School No. 11 Jambi City)

3.3.2 Sample of the Research

According to Creswell (2012), a researcher who intends to generalize to a subset of the target population is the sample. The sample is selected is random sampling by the researcher. Random sampling is performed by gathering each class representative and drawing lots for the class, resulting in two classes that use as a sample for this research. Despite the fact that only two classes use as a sample in this researcher, the researcher believes that everyone in the eleventh grade is qualify to participate in this research and will benefit from it. As a result, the researcher decides to use random sampling for the sample in this research. The sample consists of 36 students from XI Mipa 1 as the control group and 36 students from XI Mipa 2 as the experiment group.

Table 3

Sample of the Research

Class	Experiment Class	Control Class
XI MIPA 2	36	-
XI MIPA 1	-	36

3.3 Variable of the Research

A variable is a trait or characteristic of an individual that can be measured or observed and varies depending on who or what is being researched (Creswell, 2014)

This research has two variables: independent(X) and dependent(Y). The independent(X) variable is the Mind Mapping Technique, while the dependent variable(Y) is student's writing ability.

3.4 Research Instrument

A researcher must have an instrument in this research because a good instrument can guarantee the collection of valid data. Brown (2004) stated. A test is a method of measuring a person's ability or knowledge in a given domain. In this research the researcher used a writing test with a type essay test of explanation texts both for experiment class and control class. According to Hughes (2003) assessment is a crucial element in the learning process because it helps teachers evaluate students' progress in learning. Assessment can also motivate students to be more enthusiastic in achieving higher scores. To assess students learning outcomes from the experiment class and control class the

researcher used an analytical assessment rubric. In this research, the analytical

score from the University of Iowa's assessment rubric was used to analyze data

from the students' writing an explanation text ability test. The analytical

assessment rubric for writing an explanation text contains five components:

prompt task, development of explanation, structure, and language use. The

table below contains the analytical assessment criteria used in examining

students' paragraph writing an explanation text:

Table 4

Rubric of Explanation Text
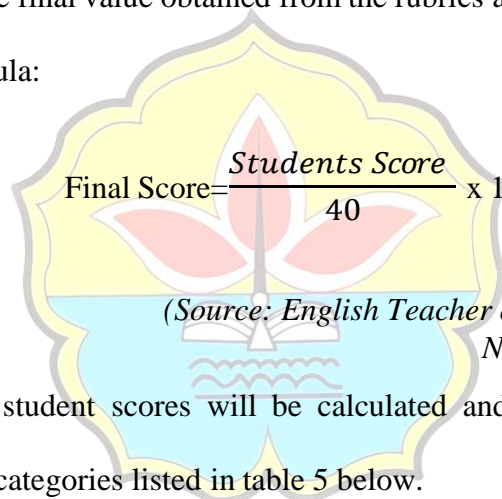
Score	Prompt Task	Development of Explanation	Organization	Language Use
5	Gives the explanation with adequately context. The topic(s) and aim of the explanation are known from the beginning.	Complete explanation of the topic(s). find the relevant facts, definitions, descriptions, examples, and/or more detailed information	Well-developed introduction. Provide a logical conclusion or section closure. Use concise and precise paragraph in a logical order. Throughout the discourse, there is a clear logical process that demonstrates relationships between ideas. Use effective and diverse transitions and syntax to connect sections of the text and improve coherence.	Use appropriate and varied vocabulary. Changing the length and complexity of sentences effectively.
4	The topic(s) and aim of the explanation are clear. Use	Topic(s) is effectively explained. Explanation	Introduction that is clear and fairly developed. Gives a clear final	Words are mostly specific and slightly variable. Uses topic-related

	appropriate evidence from the accessible texts to support the explanation.	provides some accurate and relevant facts, explanations, specifics, examples, and/or other relevant information.	statement or section. Paragraphs are used appropriate. Gives certain indications of logical concept sequencing. Uses proper transitions within and between parts of text on a regular basis.	vocabulary successfully on occasion. Provide acceptable sentences with numerous word variations relating to the topic.
3	In the overall response, the topic(s) and purpose explanations are clear. Evidence from the provided text is used, nevertheless it is limited, overused, or misinterpreted.	Topics are explained with limited details. Few or just general facts, specifics, and examples are included in explanations. Some of the information provided may be unnecessary or not unquestionably relevant.	Provides a simple introduction and a basic conclusion. Paragraphs including topic-related facts are occasionally not topic-related. Demonstrates a logical progression of ideas, even though parts of the explanation might seem out of place.	Use common vocabulary. Was unable to use topic-related terms. Although there may be some sentences that are long and difficult, the sentence form varies slightly.
2	The topic(s) and the aim of the explanation are ambiguous or otherwise confusing. Trying to use information from provided texts but failed.	Topic(s) are explained by giving some information, but the explanation is short and/or skimpy, and some of the details may be repetitive or unnecessary.	Minimal introductory evidence and/or statement or closing section. Paragraph that contains facts that are not related to the topic. Use of transitions is not controlled and can cause confusion.	Use basic and repetitious words. Using repeating words and extended, confusing sentences. Confusion over whether to use an informal or formal linguistic style that is appropriate for the audience.
1	The topic(s) and the aim of the explanation are	Topic(s) development lacks an explanation of	There is no beginning or finishing phrase	Word choice and structure of sentences are

never explained. There wasn't attempt to collect information from the text received to support the explanation.	facts, just repeats concepts, or the majority of concepts are irrelevant. may indicate a lack of comprehension of the aim of explanation writing	or section. Shows no comprehension of paragraphing (or response may be too brief to analyze). There is no evidence of idea sequencing. There are no transitions.	awkward, inaccurate, and/or unclear. Fails to get an objective tone and/or formal style that is acceptable for the intended audience and the aim; tone or style is distracting.

(Source: University of Iowa)

To find out the final value obtained from the rubrics above, the researcher

uses the formula:

$$\text{Final Score} = \frac{Students\ Score}{40} \times 100$$

(Source: English Teacher of Senior High School
Number 11 Jambi City)

Furthermore, student scores will be calculated and analyzed using the

rubric above and the categories listed in table 5 below.

Table 5

The Students Score Level

SCORE	CATEGORY
85-100	Excellent
75-84	Very Good
65-74	Good
55-64	Fairly
0-54	Failure

(Source: English Teacher of Senior High School Number 11 Jambi City)

3.5   Technique of Collecting Data

According to Brown (2004), a test is a method of measuring a person's ability, knowledge, or performance in a particular domain. In collecting data, the researcher uses some procedures as follows:

1. Pre-Test

    As a pre-test, the researcher conducted explanation text tests in the experiment class before using mind map technique and in the control class before using question and answer technique to assess students' prior knowledge

2. Treatment

    The treatments were given after the pretest has been done. After that researcher was organize class meetings to provide treatment. Researchers educated students' explanation text material for both the experimental class and the control class. Researcher used the mind map technique in the experimental class and question and answer technique in control class

There are 3 meetings that conducted by the researcher

    1. First Meeting:

        For the first meeting Students in both classes was taught the basic of understanding from explanation text such as: (1). the definition of explanation text. (2). Generic structure and (3). Language feature of explanation text.

2. Second Meeting:

   For the second meeting students in the experiment class were taught the definition of the mind mapping technique and how to make explanation text using mind mapping technique. Students in control class were taught how to make an explanation text. After students in experiment class knows how to make explanation text using the mind mapping technique and students in control class knows how to make an explanation text. Students did an essay assignment to make explanation text after completing the assignment, students and researchers were collaborated to identify the mistake in their essay.

3. Third Meeting

   The researcher make an essay assignment for experiment class using mind mapping technique and control class using question and answer technique after students completing their assignment, the researcher and students were collaborated to identify the mistakes in their essay.

Example of mind mapping technique of explanation text:

Definition (of the topic or process)　　　Description (of the parts or

(Short statement
of topic)

elements in the process)

Process (how the thing or process works)　　　concluding (statement to

close the text)
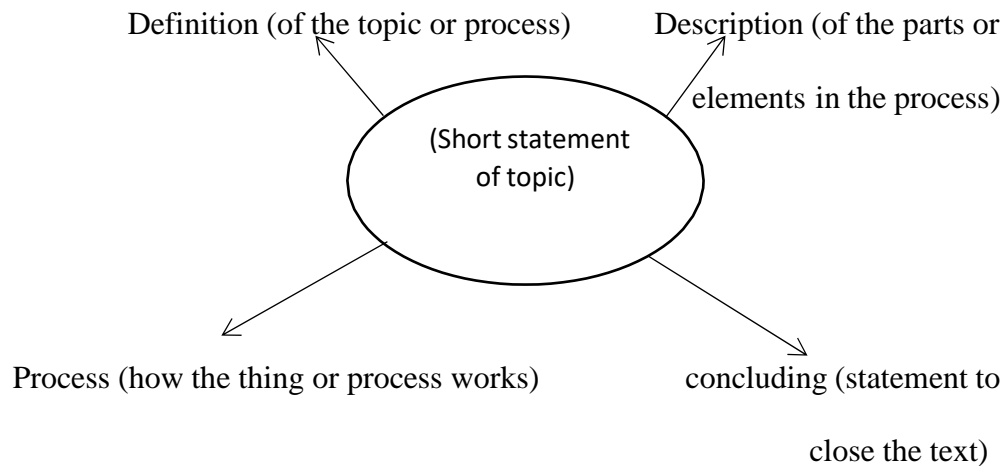
3. Post-Test

In this step, students completed a test to see how much their understanding have improved after receiving treatment. For experiment class the explanation text using mind mapping technique used as a test and for control class using question and answer technique in this post-test. The pretest and posttest data were compared to see if there is a significant effect after the treatment between using mind mapping technique for experiment class and using question and answer technique for control class.

3.6　Technique of Analysis Data

This research used SPSS application for analyzed the data of the effect of using Mind Mapping Technique toward students' ability in writing obtain from the test.

3.6.1 Descriptive Statistics

To summarize the student's responses on writing skills through mind mapping technique. The researcher used descriptive statistics to analyze the data of students' writing scores.

1. Analyze the Mean Score

   The purpose of using the mean to analyze the data is to find out the results of the scores of the two classes, where the mean results will show the difference in the results of the scores of both classes.

2. Analyze the Median Score

   The purpose of using median to analyze the data is to find out the middle value of both classes.

3. Analyze Standard Deviation

   The function of the standard deviation is to serve as a benchmark for the accuracy of data in research. The use of the standard deviation in analyzing data is to know how close the distribution of the data is to average value.

3.6.2 Normality Test

To find out whether the data in this research are regularly normally distributed, a normality test is used. The Kolmogorov-Smirnov test was used to evaluate normality in this research.

3.6.3 Homogeneity Test

The aim of a homogeneity test is to determine whether or not the variances of all unrelated population groups similar. The homogeneity test was evaluated by the researcher using the Levene test.

3.6.4 T-test

The t-test formula was used to compare the post test scores of both groups, to determine whether the differences between pre-test and post-test values are significant.

The Hypothesis test decision criteria are as follows:

1. Ha (alternative hypothesis) if the value of sig (2 tailed) <0.05. Then it shows that using the mind mapping technique have an effect on students' writing abilities.
2. Ho (null hypothesis) if the sig value (2 tailed) > 0.05. Then this shows that the use of mind mapping techniques has no effect on students' writing abilities.
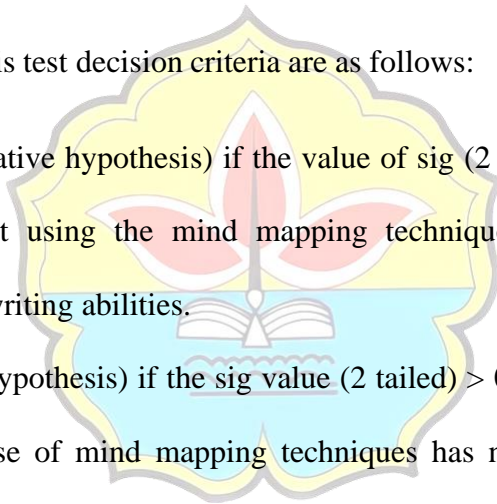
CHAPTER IV

FINDING AND DISCUSSION

4.1   Findings

The findings are based on research question which was to determine how mind mapping technique affected students' writing abilities. This research took place at SMAN 11 Jambi city from the end of February to the early of March 2023. A written test with explanation text material was used to collect data for this research.

4.1.1   Descriptive Statistic

Descriptive statistic was used to summarize the student's responses on writing skills through mind mapping technique. The researcher used descriptive statistics to analyze the data of student's writing score, which included mean, median, mode, standard deviation, etc. The SPSS application was used for the calculations for this research.

1. Pre-test and Post-test results of Experiment Class

The results of Pre-test and post-test of experiment class can be seen in table 6.

Table 6

The Pre-test and Post-test Score Distribution in the Experimental Class

Interval	Pre-test		Post-test	
	Frequency	F (%)	frequency	F (%)
85-100	0	0.00	21	58.33
75-84	1	2.78	15	41.67
65-74	18	50.00	0	000

55-64	16	44.44	0	0.00
0-54	1	2.78	0	0.00
Total	**36**	**100%**	**36**	**100%**
Mean	**63.39**		**85.64**	
Median	**65.00**		**85.50**	
Std. Dev.	**6.917**		**3.331**	
Maximum	**78**		**95**	
Minimum	**45**		**80**	

According to the table above, for pre-test there is no students in the "excellent" score, 1 student in the "very good" with percentage 2.78%, 18 students in the "good" with a percentage 50%, and 16 student received a "fairly" with percentage 44.44%, and 1 student in the "failure" with percentage 2.78%. Meanwhile for the post-test, 21 students in the "excellent" with percentage 58.33%, 15 students who scored "very good" with percentage of 41.67%, there is no students in "good", "fairly", also in the "failure".

The results of the pre-test conducted before using the mind mapping technique in the experimental class for making explanation text showed a highest score of 78 and the lowest score of 45. The mean value was 63.39, the standard deviation value was 6.917, and median value was 65.00. As a result of the post-test results created after using the mind mapping technique in the experimental class, the highest score for writing an explanation text was 95 and the lowest was 80. The mean value was 85.64, the standard deviaton value was 3.331, while the median value was 85.50.

Figure 2

Pie Charts of Pre-test and Post-Test of Experiment Class
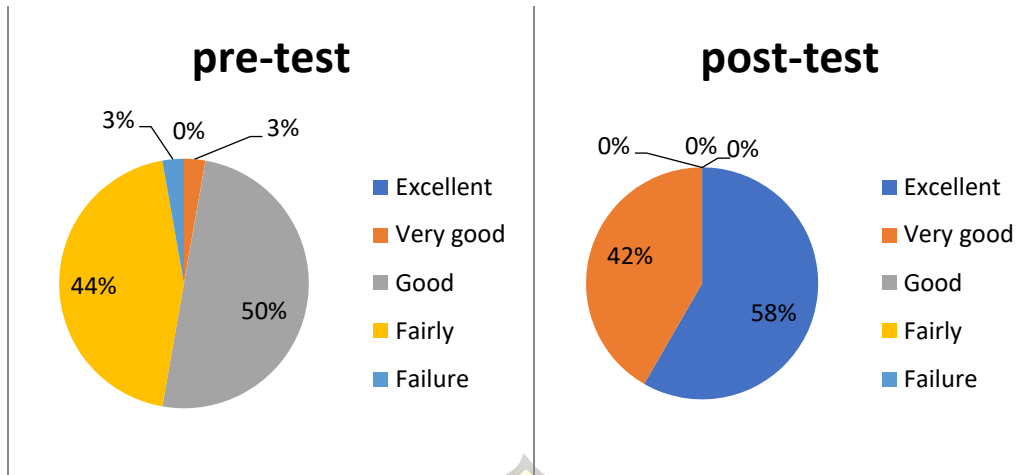
2. Pre-test and Post-test results of Control Class

    The results of Pre-test and post-test of control class can be seen in table 7.

Table 7

The Pre-test and Post-test Score Distribution in the Control Class

Interval	Pre-test		Post-test	
	Frequency	F (%)	Frequency	F (%)
85-100	0	0.00	6	16.67
75-84	3	8.33	22	61.11
65-74	27	75.00	8	22.22
55-64	6	16.67	0	0.00
0-54	0	0.00	0	0.00
Total	36	100%	36	100%
Mean	68.33		78.78	
Median	69.00		78.50	
Std. Dev.	5.275		5.009	
Maximum	76		89	
Minimum	55		71	

In the pre-test of control class, there is no student received "excellent", 3 students in the "very good" with a percentage 8.33%, 27 students in "good" with percentage 75%, 6 students in "fairly" with percentage16.67%, and no students in the "failure". Meanwhile for the post-test, 6 students in the control class "excellent" with percentage of 16.67%, 22 students received "very good" scores with percentage of 61.11%, 8 students received "good" scores with percentage of 22.22%, and no student received in "fairly" and "failure".

The results of the pre-test in the control class received the highest explanation writing result of 76 and the lowest result of 55. The mean value was 68.33, the median value was 69.00, and the standard deviation value was 5.275. Meanwhile The post-test results in the control class showed that the highest score for writing explanatory text was 89 and the lowest was 71. The mean value was 78.78 points, the median value was 78.50 points, and the standard deviation value was 5.009 point.

Figure 3

Pie Charts of Pre-test and Post-Test of Control Class
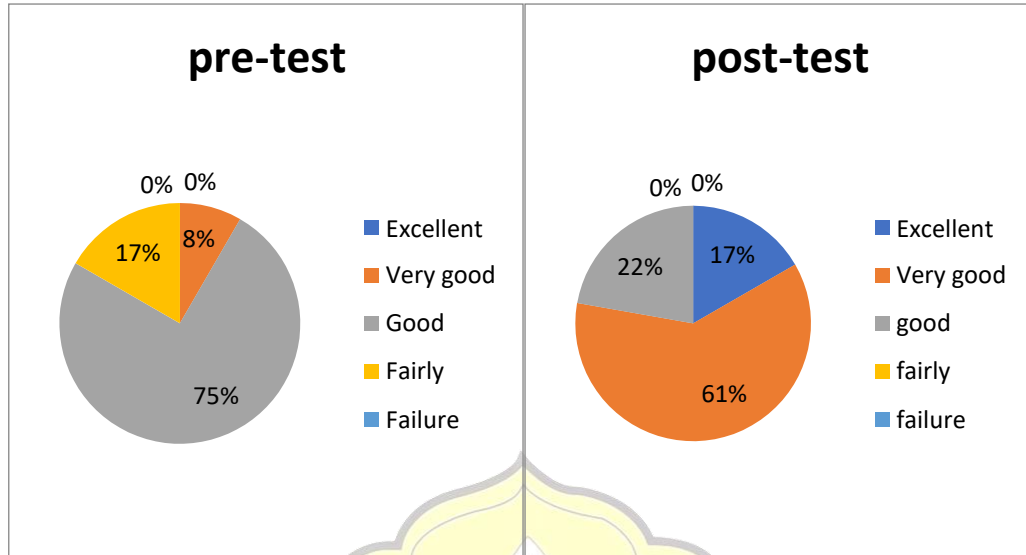
4.1.2. Normality Test

To find out whether the data in this research are regularly normally distributed, a normality test is used. The Kolmogorov-Smirnov test was used to evaluate normality in this research. The SPSS application was used for the calculations for this research. The results of normality test in this research can be seen in tables below:

Table 8

The Results of Normality Test Experiment Class

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		36
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	6.89449789
Most Extreme Differences	Absolute	.112
	Positive	.101
	Negative	-.112
Kolmogorov-Smirnov Z		.675
Asymp. Sig. (2-tailed)		.752

a. Test distribution is Normal.
b. Calculated from data.
Source: SPSS

In the table above, it can be seen that the Kolmogorov-Smirnov value is 0.675 and the asymp value. sig (2-tailed), is 0.752. The data is normally distributed because it meets the criteria determined by the normality test rules, namely, "if the Asymp. Sig. (2-tailed) is higher than the Alpha level of 5% (Asymp. Sig. (2-tailed) > 0.05), it can be concluded that the data derived from the population distribution is normal."

Table 9
The Results of Normality Test Control Class

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		36
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	4.96057330
Most Extreme Differences	Absolute	.137
	Positive	.102
	Negative	-.137
Kolmogorov-Smirnov Z		.821
Asymp. Sig. (2-tailed)		.510

a. Test distribution is Normal.

b. Calculated from data.

Source: SPSS

In the table above, it can be seen that the Kolmogorov-Smirnov value is 0.821 and the asymp value. sig (2-tailed), is 0510. The data is normally distributed because it meets the criteria determined by the normality test rules, namely, "if the Asymp. Sig. (2-tailed) is higher than the Alpha level of 5% (Asymp. Sig. (2-tailed) > 0.05), it can be concluded that the data derived from the population distribution is normal."

Based on the table above, it shows that the experiment class has a value of 0.752 > 0.05, while the control class has a value of 0.510 > 0.05. There is a difference in value between the experimental class and the control class where the asymp. Sig (2-tailed) the experiment class is larger than the control class, it can be concluded that there is a significant effect of the use of the mind map technique in

the experimental class compared to the use of conventional methods in the control

class.

4.1.3   Homogeneity Test

The aim of a homogeneity test is to determine whether or not the variances of all unrelated population groups different. The homogeneity test was evaluated by the researcher using the Levene test. The results of homogeneity test in this research can be seen in the tables below:

Table 10

The Results of Homogeneity Test Experiment Class

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.174	1	70	.678

Source: SPSS

The same as the normality test, the homogeneity test also has an instruction that says, "If the significance is less than 0.05 (sig. > 0.05), the variants are significantly similar (homogeneous)." In the table above, it can be seen that the significant value of homogeneity test is 0.678. It can be concluded that the homogeneity test of the experiment class is homogeneous.

Table 11

The Results of Homogeneity Test Control Class

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.558	1	70	.457

Source: SPSS

The same as the normality test, the homogeneity test also has an instruction that says, "If the significance is less than 0.05 (sig. > 0.05), the variants are significantly similar (homogeneous)." In the table above, it can be seen that the significant value of homogeneity test is 0.457. It can be concluded that the homogeneity test of the control class is homogeneous.

Based on the table above, it shows that the experiment class has a value of 0.678 > 0.05, while the control class has a value of 0.457 > 0.05. There is a difference in value between the experimental class and the control class where the significant value the experiment class is larger than the control class, it can be concluded that there is a significant effect of the use of the mind map technique in the experimental class compared to the use of question and answer technique in the control class.

4.1.4 Hypothesis Test

The t-test formula was used to compare the post test scores of both groups. To determine whether the differences between pre-test and post-test values are significant, the results of homogeneity test in this research can be seen in the table below:

Table 12

Hypothesis Test Results

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-eks – post-eks	22.250	7.915	1.319	-24.928	-19.572	-16.866	35	.000
Pair 2	Pre-cntrl – post-cntrl	10.444	5.911	.985	-12.444	-8.444	-10.602	35	.000

Based on the table above, it can be seen that the pre-test and post-test of the experimental class were sig. 0.000 < 0.05, while the pre-test and post-test of the control class were sig. 0.000 < 0.05. This means that Ho is rejected and Ha is accepted because the significance value of both classes is less than 0.05. As a result, it is conclude that the use of mind mapping techniques has an effect on the students' writing abilities in the eleventh grade at Senior High School Number 11 Jambi City.

4.2 Discussion

Based on the findings of this research, it can be determined that students who apply mind mapping techniques achieve higher writing scores than students who do not apply mind mapping techniques. When doing research, the researcher first gave a pretest to the experimental and control groups. The experimental class received treatment with mind mapping techniques, compared to the control group,

which received question and answer technique. Following that, the researcher conducted a posttest in both classes.

Researchers could notice distinctions between the two classes based on the student behavior. For example, prior to the treatment, students in the experimental class had trouble starting their writing, discovering main ideas to create explanatory texts, and describing the meaning of the ideas they found. As a result, student paragraphs become disorganized, including issues with language, grammar, and spelling. Students' progress in creating explanatory texts was observed after treatment. Students gain confidence in writing because they have organized their main ideas in their mind maps. Paragraphs that were jumbled at first become neat because they have structured their ideas in their mind maps. Mind maps also encourage students to think creatively and support their creativity in forming paragraphs. Meanwhile, the control group received no treatment while the explanatory paragraphs were being written. They received treatment without applying the mind-map technique. As a result, students cannot enjoy learning to write because researchers apply question and answer technique, such as using English textbooks. They are less creative in developing their writing skills because they are limited by English textbooks.

Another difference between the experimental and control classes can be found in the data from hypothesis analysis using SPSS. Based on statistical analysis calculations, the experimental class's pre-test and post-test scores were sig. $0.000 < 0.05$, while the control class's pre-test and post-test scores were sig.

0.000 < 0.05. This indicates that Ho is rejected and Ha is accepted since the significant value of the two classes is less than 0.05. The findings showed significant differences between teaching writing explanatory texts with the mind map technique and teaching writing explanatory texts without the mind map technique. The fact that the average score of students in the experimental group is higher than the average score of students in the control group demonstrates this. As a result, it is possible to conclude that using mind mapping techniques has a significant effect on students' writing ability.

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

5.1   Conclusions

After the researcher analyze the data on the chapter IV. The researcher concludes based on the chapter IV of this research, that:

1. The effect of using mind mapping can be seen in the average value of the experimental class. The pre-test mean score was 63.39, while the post-test mean score was 85.64, indicating an increase of 22.25 in the pre-test and post-test scores.

2. The difference in the mean value post-test scores of the experimental and control classes demonstrates the effect of using mind mapping techniques. The experimental class's mean value post-test score was 85.64, while the control class's mean value post-test score was 78.78.

3. Another effect can be seen in the data analysis hypothesis test, where the value sig $0.000 < 0.05$ indicates that the sig value is less than the significant degree (0.05). The hypothesis test decision criteria demonstrate that Ho is rejected while Ha is approved. That suggests that mind mapping techniques have an effect on students' writing abilities.

5.2   Suggestions

Regarding the previously stated conclusion, the researcher would like to provide the following suggestions:

1. For students, after conducting a research, the researcher suggest that students should be more active in learning English, especially how to write. Students also have to practice diligently in writing because, for researcher, writing is the best way to become a good learner

2. For English teacher, the researcher suggest English teachers find and develop new strategies for teaching writing so that students who learn it become more interested in learning to write.

3. For future researchers who are interested in researching writing learning, the researcher suggest developing various ways for the progression of writing learning so that writing becomes a joyful learning experience for students.
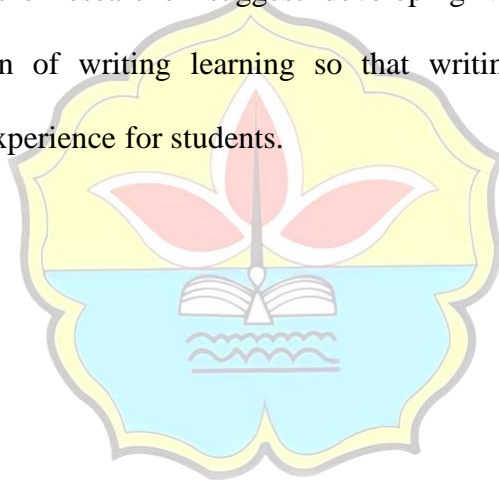
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APPENDICES

APPENDIX 1

Rubric of Explanation Text

Rubric for Explanation text for assessment students score for experiment

class and control class. The percentage of rubric obtained from an English teacher

at Senior High School Number 11 Jambi

Rubric of Explanation Text

Score	Prompt Task 3%	Development of Explanation 2%	Organization 1,5%	Language Use 1,5%
5	Gives the explanation with adequately context. The topic(s) and aim of the explanation are known from the beginning.	Complete explanation of the topic(s). find the relevant facts, definitions, descriptions, examples, and/or more detailed information	Well-developed introduction. Provide a logical conclusion or section closure. Use concise and precise paragraph in a logical order. Throughout the discourse, there is a clear logical process that demonstrates relationships between ideas. Use effective and diverse transitions and syntax to connect sections of the text and improve coherence.	Use appropriate and varied vocabulary. Changing the length and complexity of sentences effectively.
4	The topic(s) and aim of the explanation are clear. Use appropriate evidence from the accessible texts to support	Topic(s) is effectively explained. Explanation provides some accurate and relevant facts, explanations,	Introduction that is clear and fairly developed. Gives a clear final statement or section. Paragraphs are used appropriate.	Words are mostly specific and slightly variable. Uses topic-related vocabulary successfully on occasion. Provide acceptable

	the explanation.	specifics, examples, and/or other relevant information.	Gives certain indications of logical concept sequencing. Uses proper transitions within and between parts of text on a regular basis.	sentences with numerous word variations relating to the topic.
3	In the overall response, the topic(s) and purpose explanations are clear. Evidence from the provided text is used, nevertheless it is limited, overused, or misinterpreted.	Topics are explained with limited details. Few or just general facts, specifics, and examples are included in explanations. Some of the information provided may be unnecessary or not unquestionably relevant.	Provides a simple introduction and a basic conclusion. Paragraphs including topic-related facts are occasionally not topic-related. Demonstrates a logical progression of ideas, even though parts of the explanation might seem out of place.	Use common vocabulary. Was unable to use topic-related terms. Although there may be some sentences that are long and difficult, the sentence form varies slightly.
2	The topic(s) and the aim of the explanation are ambiguous or otherwise confusing. Trying to use information from provided texts but failed.	Topic(s) are explained by giving some information, but the explanation is short and/or skimpy, and some of the details may be repetitive or unnecessary.	Minimal introductory evidence and/or statement or closing section. Paragraph that contains facts that are not related to the topic. Use of transitions is not controlled and can cause confusion.	Use basic and repetitious words. Using repeating words and extended, confusing sentences. Confusion over whether to use an informal or formal linguistic style that is appropriate for the audience.
1	The topic(s) and the aim of the explanation are never explained. There wasn't attempt to collect	Topic(s) development lacks an explanation of facts, just repeats concepts, or the majority of concepts are	There is no beginning or finishing phrase or section. Shows no comprehension of paragraphing (or response may	Word choice and structure of sentences are awkward, inaccurate, and/or unclear. Fails to get an objective

	information from the text received to support the explanation.	irrelevant. may indicate a lack of comprehension of the aim of explanation writing	be too brief to analyze). There is no evidence of idea sequencing. There are no transitions.	tone and/or formal style that is acceptable for the intended audience and the aim; tone or style is distracting.

(Source: *University of Iowa)*

$$\text{Score} = \frac{3PT + DE2 + OR1,5 + LU1,5}{40} X100$$

(Source*: English teacher at Senior High School Number 11 Jambi)*

The Students Score Level

SCORE	CATEGORY
85-100	Excellent
75-84	Very Good
65-74	Good
55-64	Fairly
0-54	Failure
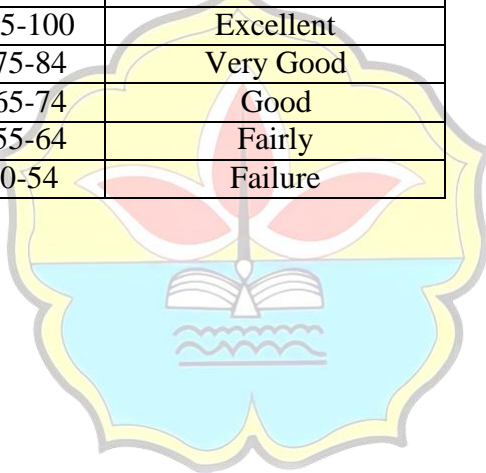
APPENDIX 2

Lesson Plan of Control Class

The lesson plan for the control class contains 4 meetings: in the first meeting, the students do the pre-test; in the second meeting, the researcher explains the explanatory text; in the third meeting, the researcher gives the task of making an explanatory text to the students; and in the fourth meeting, the students do the post-test as the final task to assess the students' abilities in writing explanatory text.

RENCANA PELAKSANAAN PEMBELAJARAN (RPP)

CONTROL CLASS

INFORMASI UMUM	
Nama Sekolah	SMAN 11 Kota Jambi
Fase/Kelas	XI (sebelas)
Topik	Mendiskripsikan bagaimana dan mengapa suatu fenomena bisa terjadi
Kata Kunci	Explanation Text
Pengetahuan	Writing
Jumlah Pertemuan	4 JP
Metode Pembelajaran	*1. Metode Ceramah*
Sarana dan Prasarana	**Media:** Laptop, Papan tulis, Spidol **Sumber Belajar:** Buku dan internet
Karakteristik Peserta Didik	Siswa regular yang aktif berdiskusi dalam kegiatan pembelajaran dan bernalar kritis serta mampu mendeskripsikan suatu fenomena yang terjadi dengan mandiri dan tidak pantang menyerah.

KOMPETENSI INTI	

A. Tujuan Pembelajaran

Setelah melakukan Pembelajaran, diharapkan peserta didik mampu:

1. Menjelaskan definisi, tujuan, struktur teks, ciri-ciri unsur kebahasaan dari teks eksplanasi.
2. Menyusun teks eksplanasi, pendek dan sederhana, terkait fenomena yang dibahas, dengan memperhatikan fungsi sosial, struktur teks dan unsur kebahasaan, secara benar dan sesuai konteks

B. Pemahaman Bermakna

Expalanation text merupakan salah satu jenis teks dalam belajar bahasa inggris yang memiliki fungsi untuk mendeskripsikan tentang bagaimana dan mengapa suatu fenomena bisa terjadi. Teks ini bertujuan untuk memberikan informasi dan menjelaskan sesuatu fenomena untuk pembaca mendapatkan informasi yang bermanfaat.

C. Pertanyaan Pemantik

1. Apakah kalian (peserta didik) pernah merasa penasaran akan sesuatu fenomena yang terjadi di sekitar meraka?

KEGIATAN PEMBELAJARAN

Pertemuan Pertama

A. Tujuan Pembelajaran

- Menjelaskan definisi, tujuan, struktur teks, ciri-ciri unsur kebahasaan dari teks eksplanasi.
- Menyusun teks eksplanasi, pendek sederhana tetapi detail, terkait suatu fenomena, dengan memperhatikan fungsi sosial, struktur teks dan unsur kebahasaan, secara benar dan sesuai konteks

B. Kegiatan Pembelajaran

Tahap Pembelajaran	Kegiatan Pembelajaran
Kegiatan Pendahuluan	• Mengucapkan salam dan langsung menyapa menggunakan bahasa inggris agar tercipta English Environment dapat langsung tercipta di pertemuan pertama. • Mengkondisikan kelas, mengawali proses belajar mengajar dengan membaca doa bersama-sama. • Kemudian dilanjutkan dengan menanyakan kabar siswa serta mengecek daftar hadir dan menanyakan siapa yang tidak hadir.
Kegiatan Inti	• Guru memberikan Penjelasan singkat

	mengenai Writing Test sebagai Pre-Test
	• Guru memberikan instruksi kepada siswa untuk menulis sebagai Pre-Test
	• Mengawasi siswa yang sedang mengerjakan Writing Testnya
Kegiatan Penutup	• Guru mengumpulkan lembar jawaban siswa
	• Menyampaikan materi yang akan dipelajari di pertemuan kedua
	• Mengintruksikan siswa untuk membaca teks eksplanasi di rumah

Pertemuan Kedua

Tahap Pembelajaran	Kegiatan Pembelajaran
Kegiatan Pendahuluan	• Mengucapkan salam dan langsung menyapa menggunakan bahasa inggris agar tercipta English Environment dapat langsung tercipta di pertemuan pertama.
	• Mengkondisikan kelas, mengawali proses belajar mengajar dengan membaca doa bersama-sama.
	• Kemudian dilanjutkan dengan menanyakan kabar siswa serta mengecek daftar hadir dan menanyakan siapa yang tidak hadir.
Kegiatan Inti	• Guru memberikan contoh teks eksplanasi kepada siswa untuk dipelajari.
	• Siswa mendengarkan dan memperhatikan penjelasan dari guru tentang pengertian, pola paragraf dan struktur kebahasaan paragraf teks eksplanasi.
	• Guru akan memberikan siswa sebuah contoh teks eskplanasi dan bersama guru, siswa akan menentukan pola paragraf, struktur kebahasaan paragraph dari teks eskplanasi
	• Bertanya kepada siswa tentang paragraf teks eksplanasi
	• Memberikan umpan balik positif dan penguatan dalam bentuk lisan (good job, great, well done), tulisan, isyarat (giving

55

	applause), maupun hadiah terhadap keberhasilan peserta didik.
Kegiatan Penutup	• Memberi kesempatan kepada peserta didik untuk bertanya. • Mengulas secara singkat apa yang telah dipelajari hari ini. • Feedback untuk mengetahui daya serap siswa. • Mengintruksikan siswa untuk membaca teks eksplanasi lainnya dirumah.

Pertemuan Ketiga

Tahap Pembelajaran	Kegiatan Pembelajaran
Kegiatan Pendahuluan	• Mengucapkan salam dan langsung menyapa menggunakan bahasa inggris agar tercipta English Environment dapat langsung tercipta di pertemuan pertama. • Mengkondisikan kelas, mengawali proses belajar mengajar dengan membaca doa bersama-sama. • Kemudian dilanjutkan dengan menanyakan kabar siswa serta mengecek daftar hadir dan menanyakan siapa yang tidak hadir.
Kegiatan Inti	• Guru memberikan tugas membuat teks eksplanasi kepada siswa • Bertanya kepada siswa tentang paragraph eksplanasi • Memberikan umpan balik positif dan penguatan dalam bentuk lisan (good job, great, well done), tulisan, isyarat (giving applause), maupun hadiah terhadap keberhasilan peserta didik.
Kegiatan Penutup	• Memberi kesempatan kepada peserta didik untuk bertanya. • Mengulas secara singkat apa yang telah dipelajari hari ini. • Feedback untuk mengetahui daya serap

Tahap Pembelajaran	Kegiatan Pembelajaran
	siswa. • Mengintruksikan siswa untuk membaca teks deskriptif lainnya dirumah.

Pertemuan Keempat:

Tahap Pembelajaran	Kegiatan Pembelajaran
Kegiatan Pembuka	• Mengucapkan salam dan langsung menyapa menggunakan bahasa inggris agar tercipta English Environment dapat langsung tercipta di pertemuan pertama. • Mengkondisikan kelas, mengawali proses belajar mengajar dengan membaca doa bersama-sama. • Kemudian dilanjutkan dengan menanyakan kabar siswa serta mengecek daftar hadir dan menanyakan siapa yang tidak hadir.
Kegiatan Inti	• Guru memberikan penjelasan singkat mengenai Writing Test sebagai Post – Test . • Guru memberikan intruksi kepada siswa untuk menulis sebuah teks eksplanasi sebagai Post – Test. • Mengawasi siswa yang sedang mengerjakan Writing Test nya
Kegiatan Penutup	• Guru mengumpulkan lembar jawaban siswa • Guru memberikan apresiasi dan mengucapkan terima kasih kepada siswa yang telah membantu guru dalam penelitian.

C. PENILAIAN
1. Bentuk dan Teknik

Indikator	Tekhnik	Bentuk Instrument
1. Memahami struktur paragraf dan ciri kebahasaan yang ada dalam teks eksplanasi. 2. Menyusun ide untuk menyusun paragraph teks	Tes Lisan	Tanya Jawab

	eksplanasi.		
3.	Menghasilkan teks essai yang berbentuk eksplanasi sesuai dengan topik yang telah ditentukan.	Tes Tertulis	Essay

2. Instrumen Penilaian: Rubric of analytical scoring
3. Instrument Penilaian Aspek Pengetahuan
   a. Teknik Penilaian   : Tes Tertulis
   b. Bentuk Instrument   : Menulis Paragraf

Jambi,   Maret 2023

Diketahui

Guru Pamong   Peneliti

Rita Rusli, S.Pd   Windi Tri Maiharani

NIP: 19690927 199512 2 002   NIM: 1900888203022
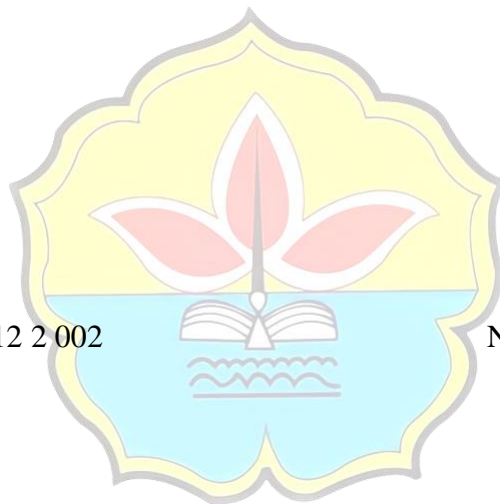
Lesson Plan of Experiment Class

The lesson plan for the experiment class contains 4 meetings: in the first meeting, the students do the pre-test; in the second meeting, the researcher explains the explanatory text and explain mind mapping technique; in the third meeting, the researcher gives the task of making an explanatory text using mind mapping technique to the students; and in the fourth meeting, the students do the post-test as the final task to assess the students' abilities in writing explanatory text.

RENCANA PELAKSANAAN PEMBELAJARAN (RPP)

EXPERIMENT CLASS

INFORMASI UMUM	
Nama Sekolah	SMAN 11 Kota Jambi
Fase/Kelas	XI (sebelas)
Topik	Mendiskripsikan bagaimana dan mengapa suatu fenomena bisa terjadi
Kata Kunci	Explanation Text
Pengetahuan	Writing
Jumlah Pertemuan	4 JP
Metode Pembelajaran	*1. Mind Mapping Technique.*
Sarana dan Prasarana	**Media:** Laptop, Papan tulis, Spidol **Sumber Belajar:** Buku dan internet
Karakteristik Peserta Didik	Siswa regular yang aktif berdiskusi dalam kegiatan pembelajaran dan bernalar kritis serta mampu mendeskripsikan suatu fenomena yang terjadi dengan mandiri dan tidak pantang menyerah.

KOMPETENSI INTI
D. Tujuan Pembelajaran
Setelah melakukan Pembelajaran, diharapkan peserta didik mampu: 1. Menjelaskan definisi, tujuan, struktur teks, ciri-ciri unsur kebahasaan dari teks eksplanasi.   2. Menemukan ide dengan menggunakan Teknik Mind Mapping   3. Menyusun ide yang didapat saat menggunakan Teknik Mind Mapping   4. Menyusun teks eksplanasi, pendek dan sederhana, terkait fenomena yang dibahas, dengan memperhatikan fungsi sosial, struktur teks dan unsur kebahasaan, secara benar dan sesuai konteks
1. Pemahaman Bermakna
Expalanation text merupakan salah satu jenis teks dalam belajar bahasa inggris yang memiliki fungsi untuk mendeskripsikan tentang bagaimana dan mengapa suatu fenomena bisa terjadi. Teks ini bertujuan untuk memberikan informasi dan menjelaskan sesuatu fenomena untuk pembaca mendapatkan informasi yang bermanfaat.
2. Pertanyaan Pemantik
1. Apakah kalian (peserta didik) pernah merasa penasaran akan sesuatu fenomena yang terjadi di sekitar meraka?

KEGIATAN PEMBELAJARAN

Pertemuan Pertama

D. Tujuan Pembelajaran

- Menjelaskan definisi, tujuan, struktur teks, ciri-ciri unsur kebahasaan dari teks eksplanasi.
- Menemukan ide dengan menggunakan Teknik Mind Mapping
- Menyusun ide yang didapat saat menggunakan Teknik Mind Mapping
- Menyusun teks eksplanasi, pendek sederhana tetapi detail, terkait suatu fenomena, dengan memperhatikan fungsi sosial, struktur teks dan unsur kebahasaan, secara benar dan sesuai konteks

E. Kegiatan Pembelajaran

Tahap Pembelajaran	Kegiatan Pembelajaran
Kegiatan Pendahuluan	• Mengucapkan salam dan langsung menyapa menggunakan bahasa inggris agar tercipta English Environment dapat langsung tercipta di pertemuan pertama. • Mengkondisikan kelas, mengawali proses

Tahap Pembelajaran	Kegiatan Pembelajaran
	belajar mengajar dengan membaca doa bersama-sama.
	• Kemudian dilanjutkan dengan menanyakan kabar siswa serta mengecek daftar hadir dan menanyakan siapa yang tidak hadir.
Kegiatan Inti	• Guru memberikan Penjelasan singkat mengenai Writing Test sebagai Pre-Test
	• Guru memberikan instruksi kepada siswa untuk menulis sebagai Pre-Test
	• Mengawasi siswa yang sedang mengerjakan Writing Testnya
Kegiatan Penutup	• Guru mengumpulkan lembar jawaban siswa
	• Menyampaikan materi yang akan dipelajari di pertemuan kedua
	• Mengintruksikan siswa untuk membaca teks eksplanasi di rumah

Pertemuan Kedua

Tahap Pembelajaran	Kegiatan Pembelajaran
Kegiatan Pendahuluan	• Mengucapkan salam dan langsung menyapa menggunakan bahasa inggris agar tercipta English Environment dapat langsung tercipta di pertemuan pertama.
	• Mengkondisikan kelas, mengawali proses belajar mengajar dengan membaca doa bersama-sama.
	• Kemudian dilanjutkan dengan menanyakan kabar siswa serta mengecek daftar hadir dan menanyakan siapa yang tidak hadir.
Kegiatan Inti	• Guru memberikan contoh teks eksplanasi kepada siswa untuk dipelajari.
	• Siswa mendengarkan dan memperhatikan penjelasan dari guru tentang pengertian, pola paragraf dan struktur kebahasaan paragraf teks eksplanasi.
	• Guru akan memberikan siswa sebuah contoh teks eskplanasi dan bersama guru, siswa akan menentukan pola paragraf, struktur

	kebahasaan paragraph dari teks eskplanasi
	• Guru memperkenalkan dan menjelaskan teknik mind mapping
	• Memberikan umpan balik positif dan penguatan dalam bentuk lisan (good job, great, well done), tulisan, isyarat (giving applause), maupun hadiah terhadap keberhasilan peserta didik.
Kegiatan Penutup	• Memberi kesempatan kepada peserta didik untuk bertanya.
	• Mengulas secara singkat apa yang telah dipelajari hari ini.
	• Feedback untuk mengetahui daya serap siswa.
	• Mengintruksikan siswa untuk membaca teks eksplanasi lainnya dirumah.

Pertemuan Ketiga

Tahap Pembelajaran	Kegiatan Pembelajaran
Kegiatan Pendahuluan	• Mengucapkan salam dan langsung menyapa menggunakan bahasa inggris agar tercipta English Environment dapat langsung tercipta di pertemuan pertama.
	• Mengkondisikan kelas, mengawali proses belajar mengajar dengan membaca doa bersama-sama.
	• Kemudian dilanjutkan dengan menanyakan kabar siswa serta mengecek daftar hadir dan menanyakan siapa yang tidak hadir.
Kegiatan Inti	• Guru menjelaskan dan memberikan contoh teks eksplanasi menggunakan teknik mind mapping
	• Setelah para siswa memahami cara menentukan kata kunci yang akan mereka gunakan, dan memahami semua materi yang telah disampaikan yang berkaitan dengan teks eksplanasi. Siswa diminta untuk

	membuat paragraph eksplanasi secara individu dengan topik yang telah ditentukan oleh guru. Kemudian mengadaptasi teknik mind mapping dalam menuangkan ide.
	• Siswa menyusun teks eksplanasi berdasarkan teknik mind mapping.
	• Bertanya kepada siswa tentang paragraph eksplanasi
	• Untuk lebih memahami dalam membuat teks eksplanasi menggunakan teknik mind mapping siswa diminta untuk mengerjakan tugas membuat teks eksplanasi menggunakan teknik mind mapping dirumah
	• Memberikan umpan balik positif dan penguatan dalam bentuk lisan (good job, great, well done), tulisan, isyarat (giving applause), maupun hadiah terhadap keberhasilan peserta didik.
Kegiatan Penutup	• Memberi kesempatan kepada peserta didik untuk bertanya.
	• Mengulas secara singkat apa yang telah dipelajari hari ini.
	• Feedback untuk mengetahui daya serap siswa.
	• Mengintruksikan siswa untuk membaca teks deskriptif lainnya dirumah.

Pertemuan Keempat:

Tahap Pembelajaran	Kegiatan Pembelajaran
Kegiatan Pembuka	• Mengucapkan salam dan langsung menyapa menggunakan bahasa inggris agar tercipta English Environment dapat langsung tercipta di pertemuan pertama.
	• Mengkondisikan kelas, mengawali proses belajar mengajar dengan membaca doa bersama-sama.
	• Kemudian dilanjutkan dengan menanyakan kabar siswa serta mengecek daftar hadir dan

	menanyakan siapa yang tidak hadir.
Kegiatan Inti	• Guru memberikan penjelasan singkat mengenai Writing Test sebagai Post – Test . • Guru memberikan intruksi kepada siswa untuk menulis sebuah teks eksplanasi sebagai Post – Test. • Mengawasi siswa yang sedang mengerjakan Writing Test nya
Kegiatan Penutup	• Guru mengumpulkan lembar jawaban siswa • Guru memberikan apresiasi dan mengucapkan terima kasih kepada siswa yang telah membantu guru dalam penelitian.

F. PENILAIAN

1. Bentuk dan Teknik

Indikator	Tekhnik	Bentuk Instrument
1. Memahami struktur paragraf dan ciri kebahasaan yang ada dalam teks eksplanasi. 2. Menemukan ide dengan menggunakan Teknik Mind Mapping. 3. Menyusun ide untuk menyusun paragraph teks eksplanasi. 4. Menghasilkan teks essai yang berbentuk eksplanasi sesuai dengan topik yang telah ditentukan.	Tes Lisan Tes Tertulis	Tanya Jawab Essay

2. Instrumen Penilaian: Rubric of analytical scoring
3. Instrument Penilaian Aspek Pengetahuan
   c. Teknik Penilaian   : Tes Tertulis
   d. Bentuk Instrument   : Menulis Paragraf

                                    Jambi,   Maret 2023
Diketahui
Guru Pamong   Peneliti

Rita Rusli, S.Pd   Windi Tri Maiharani
NIP: 19690927 199512 2 002   NIM: 1900888203022
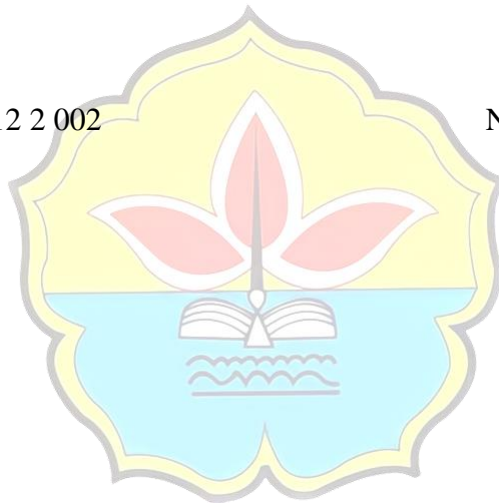
Pre-Test Sheet

The instrument used for the pre-test for the experimental class and control

class was a test of writing explanatory text with a predetermined theme.

Pre-Test

Experiment Class and Control Class

Name :

Class   :

Find your brilliant ideas based on the topic and write down into a paragraph!

Topic : Natural Phenomenon
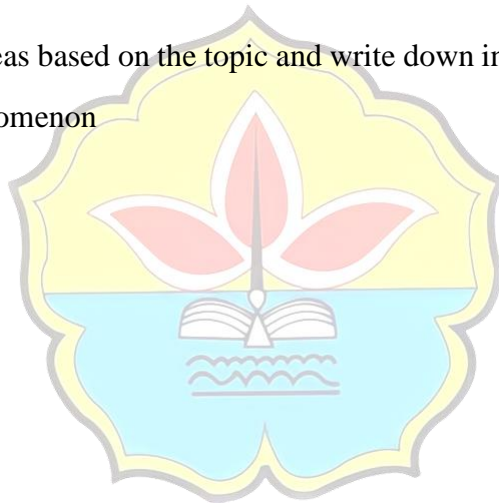
APPENDIX 5

Post-Test Sheet

The instrument used for the post-test for the experimental class and control

class was a test of writing explanatory text with a predetermined theme.

Post-Test

Experimental Class and Control Class

Name :

Class   :

Find your brilliant ideas based on the topic and write down into a paragraph!

Topic : Natural Phenomenon
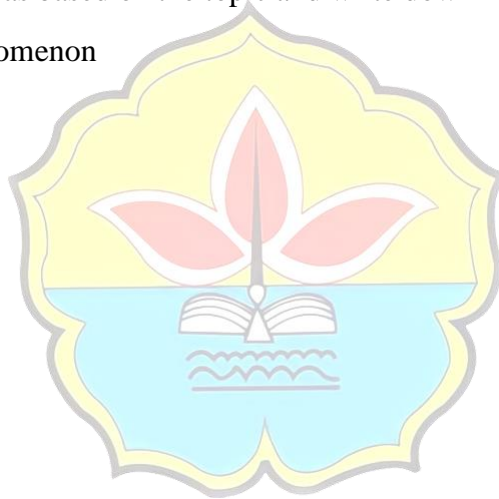
APPENDIX 6

The Student's Pre-test and Post-Test Results

Pre-Test

Control Class

Name : Devi lestari

Class : XI MIPA 1

Find your brilliant ideas based on the topic and write down into a paragraph!

Topic : Animal/Plant

How lightning Happens

Did you know that lightning is one of the oldest natural phenomena that can be observed on earth lightning is very hot, this heat causes the air around it to expand and vibrate rapidly, which then creates a thunderous roar shortly after seeing a flash of lightning.

Lightning is formed from Cumulonimbus Clouds within Positively and negatively charged particels the particles rub against each other and enough energy will be released in the form of lightning.

So lightning occurs because clouds rub against each other. People are expected to avoid places that have the potential to become objects of lightning resistance.

Name : Suci Putri Febby

Class : XI MIPA 1

Find your brilliant ideas based on the topic and write down into a paragraph!

Topic : Animal/Plant

SOLAR ECLIPSE

A solar eclipse occurs when the position of the moon is between the earth and the sun so that it appears to cover part or all of the sun's light in the earth's sky. But do you know how a solar eclipse can occur?

A solar eclipse occurs when the moon is between the sun and the earth during the new moon phase. The shadow has two parts, namely the umbra (a cone-shaped that gets smaller as it gets away from the earth or the moon) and the penumbra (a blurred or partial shadow area). The trajectory of the moon is not round resulting in the moon's shadow not being able to reach the earth. This situation is called an annular solar eclipse.

The total solar eclipse lasts 6 minutes. Observing a solar eclipse requires special eye protection or by using indirect viewing methods and for astronomers, especially stargazers the phenomena of a solar eclipse becomes a spectacular astronomical phenomena.

Preferably if there is a solar eclipse we have to see the process of the eclipse because a solar eclipse occurs every 5 years.

Name : Andi M Aries

Class : Ximipa 2

Find your brilliant ideas based on the topic and write down into a paragraph!

Topic : Animal/Plant

photosintosis

A solar ecps is a unique natural phononom because it ocorus ovry 25 yoas. An Clipcose is a natural phenomon coused by the shadow fonmod by erth or moon long in one line. occlipse are funulod when the sons cy6h is blacked by meon or the orth. the suals a vory logr shier co y hos a long gnavtnoual foros as wsu. A foloh olcspse ocors whol ho moors surfoco.

A solar ccospsa acure when the moon is bonwoon the now moon phos. the shodow hos now pons nomroy the orth or the moo] and the paunbrai (bouvo, or prono] shodew aroo). A parnar solor oucpopo ocorts whon the moaoe panomba covors all the moor panomtong the ofocy oror of the moor shodow not boicj aru to rooh the oart ther soooson is couon ov ouasing soeor eoscie

Name : Adinda Zahirra Aditya

Class : XI IPA 2

Find your brilliant ideas based on the topic and write down into a paragraph!

Topic : Animal/Plant

How is snow made ?

We all agree that the snowfall is always fascinating. In the snowfall, all people stay out of the house and play with the snow. People can make giant snowman, trample along the snow, or play with snowballs with their families. However, are you curious about how snow is made?

Snow is water droplets falling from the clouds. These droplet waters then become solid and create snow. It happens because rain consists of water vapor particles being cooled in the air.

Snow happens when water vapor piled up in the earth's atmosphere freezes. It happens before they turn into water droplets. This process occurs when the temperature in the cloud becomes very frigid

Snowflakes are created by crystals of ice that have established around a little filth in the air. They then grow from small froms into big one. The form of snowflakes is varied. They can consist of 200 crystals maximum.

Post Test
Experiment Test

Name : Adinda Zahirra Aditya
Class : XI IPA 2

Mind Mapping
How is snow made?

This process occurs when the temperature in the cloud become Frigid.

Consist of water vapor particles being cooled in the air

Water droplets falling from the clouds. Then become solid and create snow

How is snow made?

Snowflakes are created by crystals of ice that have establised around a little filth in the air.

The form of snow Flakes is varied they can consist of 200 crystals maximum.

APPENDIX 7

The Scores Results of Experiment Class

Pre-test and Post-test Results of Experiment Class (XI MIPA 2)

No	Students	Total of Pre-test	Classification	Total of Post-test	Classification
1	AS	64	Fairly	86	Excellent
2	AZA	55	Fairly	89	Excellent
3	AA	55	Fairly	90	Excellent
4	AN	55	Fairly	83	Very Good
5	AMA	70	Good	86	Excellent
6	AK	65	Good	85	Excellent
7	AC	56	Fairly	83	Very Good
8	CP	45	Fail	90	Excellent
9	CNA	67	Fairly	90	Excellent
10	CD	58	Fairly	83	Very Good
11	CHM	59	Fairly	87	Excellent
12	DR	65	Good	84	Very Good
13	DR	67	Good	81	Very Good
14	ENP	65	Good	80	Very Good
15	FAZ	64	Fairly	84	Very Good
16	FAR	63	Fairly	89	Excellent
17	GFM	62	Fairly	85	Excellent
18	IM	61	Fairly	81	Very Good
19	IM	78	Very good	83	Very Good
20	IR	72	Good	88	Excellent
21	JA	67	Good	83	Very Good
22	KN	68	Good	85	Excellent
23	KFA	69	Good	88	Excellent
24	MH	60	Fairly	86	Excellent
25	MNA	72	Good	86	Excellent
26	MAH	69	Good	90	Excellent
27	MRA	73	Good	95	Excellent
28	NSP	71	Good	86	Excellent
29	PDS	56	Fairly	84	Very Good
30	PRR	55	Fairly	83	Very Good
31	RDP	55	Fairly	87	Excellent
32	RNF	65	Good	90	Excellent
33	RNA	65	Good	80	Very Good
34	RA	67	Good	83	Very Good
35	LFU	69	Good	84	Very Good
36	SPW	55	Fairly	86	Excellent

APPENDIX 8

The Scores Results of Control Class

Pre-test and Post-test Results of Control Class (XI MIPA 1)

No	Students	Total of Pre-test	Classification	Total of Post-test	Classification
1	AFP	71	Good	75	Very Good
2	AD	65	Good	80	Very Good
3	AFI	74	Good	71	Good
4	AIH	65	Good	77	Very Good
5	ATM	63	Fairly	75	Very Good
6	AS	76	Very good	72	Good
7	AO	75	Very good	73	Good
8	AR	74	Good	79	Very Good
9	BHG	73	Good	73	Good
10	DSY	72	Good	77	Very Good
11	DL	71	Good	78	Very Good
12	DPA	70	Good	80	Very Good
13	EM	67	Good	77	Very Good
14	HFH	68	Good	78	Very Good
15	ICM	69	Good	80	Very Good
16	IP	70	Good	81	Very Good
17	LL	65	Good	82	Very Good
18	MFN	66	Good	86	Very Good
19	MRR	69	Good	87	Very Good
20	MWA	68	Good	88	Very Good
21	MAA	67	Good	89	Very Good
22	NPS	69	Good	76	Good
23	NWA	59	Fairly	75	Good
24	NA	68	Good	74	Good
25	NAS	73	Good	73	Good
26	RPD	75	Very Good	72	Good
27	RFM	55	Fairly	71	Good
28	RDG	74	Good	78	Very Good
29	RVS	73	Good	79	Very Good
30	RGS	59	Fairly	79	Very Good
31	SP	68	Fairly	86	Excellent
32	SPF	59	Fairly	85	Excellent
33	SS	60	Fairly	84	Very Good
34	TE	71	Good	83	Good
35	VD	65	Good	82	Good
36	YPS	74	Good	81	Good

APPENDIX 9

The Results of Data Analysis

Results of data analysis from the experimental class and the control class

1. **Frequency of Pre-test and Post-test Experiment Class**

Statistics

		PREEKS	POSTEKS
N	Valid	36	36
	Missing	0	0
Mean		63.39	85.64
Median		65.00	85.50
Mode		55	83
Std. Deviation		6.917	3.331
Minimum		45	80
Maximum		78	95
Sum		2282	3083

Source: SPSS 21

A. Pre-test of Experiment Class

PREEKS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	45	1	2.8	2.8	2.8
	55	6	16.7	16.7	19.4
	56	2	5.6	5.6	25.0
	58	1	2.8	2.8	27.8
	59	1	2.8	2.8	30.6
	60	1	2.8	2.8	33.3
	61	1	2.8	2.8	36.1
	62	1	2.8	2.8	38.9
	63	1	2.8	2.8	41.7
	64	2	5.6	5.6	47.2
	65	5	13.9	13.9	61.1
	67	4	11.1	11.1	72.2

		Frequency	Percent	Valid Percent	Cumulative Percent
	68	1	2.8	2.8	75.0
	69	3	8.3	8.3	83.3
	70	1	2.8	2.8	86.1
	71	1	2.8	2.8	88.9
	72	2	5.6	5.6	94.4
	73	1	2.8	2.8	97.2
	78	1	2.8	2.8	100.0
	Total	36	100.0	100.0	

Source: SPSS 21

B. Post-test of Experiment Class

POSTEKS

		Frequency	Percent	Valid Percent	Cumulative Percent
	80	2	5.6	5.6	5.6
	81	2	5.6	5.6	11.1
	83	7	19.4	19.4	30.6
	84	4	11.1	11.1	41.7
	85	3	8.3	8.3	50.0
Valid	86	6	16.7	16.7	66.7
	87	2	5.6	5.6	72.2
	88	2	5.6	5.6	77.8
	89	2	5.6	5.6	83.3
	90	5	13.9	13.9	97.2
	95	1	2.8	2.8	100.0
	Total	36	100.0	100.0	

Source: SPSS 21

2. Frequency of Pre-test and Post-test Control Class

Statistics

		PRECNTRL	POSTCNTRL
N	Valid	36	36
	Missing	0	0
Mean		68.33	78.78
Median		69.00	78.50
Mode		65[a]	73[a]
Std. Deviation		5.275	5.009
Minimum		55	71
Maximum		76	89
Sum		2460	2836

Source: SPSS 21

A. Pre-test of Control Class

PRECNTRL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	55	1	2.8	2.8	2.8
	59	3	8.3	8.3	11.1
	60	1	2.8	2.8	13.9
	63	1	2.8	2.8	16.7
	65	4	11.1	11.1	27.8
	66	1	2.8	2.8	30.6
	67	2	5.6	5.6	36.1
	68	4	11.1	11.1	47.2
	69	3	8.3	8.3	55.6
	70	2	5.6	5.6	61.1
	71	3	8.3	8.3	69.4
	72	1	2.8	2.8	72.2
	73	3	8.3	8.3	80.6
	74	4	11.1	11.1	91.7
	75	2	5.6	5.6	97.2
	76	1	2.8	2.8	100.0
	Total	36	100.0	100.0	

Source: SPSS 21

B. Post-test of Control Class

POSTCNTRL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	71	2	5.6	5.6	5.6
	72	2	5.6	5.6	11.1
	73	3	8.3	8.3	19.4
	74	1	2.8	2.8	22.2
	75	3	8.3	8.3	30.6
	76	1	2.8	2.8	33.3
	77	3	8.3	8.3	41.7
	78	3	8.3	8.3	50.0
	79	3	8.3	8.3	58.3
	80	3	8.3	8.3	66.7
	81	2	5.6	5.6	72.2
	82	2	5.6	5.6	77.8
	83	1	2.8	2.8	80.6
	84	1	2.8	2.8	83.3
	85	1	2.8	2.8	86.1
	86	2	5.6	5.6	91.7
	87	1	2.8	2.8	94.4
	88	1	2.8	2.8	97.2
	89	1	2.8	2.8	100.0
	Total	36	100.0	100.0	

Source: SPSS 21

3. The Result of Normality Test Experiment Class

		Unstandardized Residual
N		36
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	6.89449789
Most Extreme Differences	Absolute	.112
	Positive	.101
	Negative	-.112
Kolmogorov-Smirnov Z		.675
Asymp. Sig. (2-tailed)		.752

a. Test distribution is Normal.
b. Calculated from data.
Source: SPSS 21

4. The Results of Normality Test Control Class

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		36
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	4.96057330
Most Extreme Differences	Absolute	.137
	Positive	.102
	Negative	-.137
Kolmogorov-Smirnov Z		.821
Asymp. Sig. (2-tailed)		.510

a. Test distribution is Normal.

b. Calculated from data.
Source: SPSS 21

5. The Results of Homogeneity Test Experiment Class

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.174	1	70	.678

Source: SPSS 21

6. The Results of Homogeneity Test Control Class

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.558	1	70	.457

Source: SPSS 21

7. The Results of Hypothesis Experiment Class

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-eks – post-eks	-22.250	7.915	1.319	-24.928	-19.572	-16.866	35	.000
Pair 2	Pre-cntrl – post-cntrl	-10.444	5.911	.985	-12.444	-8.444	-10.602	35	.000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PREEKS	63.39	36	6.917	1.153
	POSTEKS	85.64	36	3.331	.555
Pair 2	PRECNTRL	68.33	36	5.275	.879
	POSTCNTRL	78.78	36	5.009	.835

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PREEKS & POSTEKS	36	-.081	.641
Pair 2	PRECNTRL & POSTCNTRL	36	.340	.042

8. T-table

Pr / Df	0.25 / 0.50	0.10 / 0.20	0.05 / 0.10	0.025 / 0.050	0.01 / 0.02	0.005 / 0.010	0.001 / 0.002
1	1.00000	3.07768	6.31375	12.70620	31.82052	63.65674	318.30884
2	0.81650	1.88562	2.91999	4.30265	6.96456	9.92484	22.32712
3	0.76489	1.63774	2.35336	3.18245	4.54070	5.84091	10.21453
4	0.74070	1.53321	2.13185	2.77645	3.74695	4.60409	7.17318
5	0.72669	1.47588	2.01505	2.57058	3.36493	4.03214	5.89343
6	0.71756	1.43976	1.94318	2.44691	3.14267	3.70743	5.20763
7	0.71114	1.41492	1.89458	2.36462	2.99795	3.49948	4.78529
8	0.70639	1.39682	1.85955	2.30600	2.89646	3.35539	4.50079
9	0.70272	1.38303	1.83311	2.26216	2.82144	3.24984	4.29681
10	0.69981	1.37218	1.81246	2.22814	2.76377	3.16927	4.14370
11	0.69745	1.36343	1.79588	2.20099	2.71808	3.10581	4.02470
12	0.69548	1.35622	1.78229	2.17881	2.68100	3.05454	3.92963
13	0.69383	1.35017	1.77093	2.16037	2.65031	3.01228	3.85198
14	0.69242	1.34503	1.76131	2.14479	2.62449	2.97684	3.78739
15	0.69120	1.34061	1.75305	2.13145	2.60248	2.94671	3.73283
16	0.69013	1.33676	1.74588	2.11991	2.58349	2.92078	3.68615
17	0.68920	1.33338	1.73961	2.10982	2.56693	2.89823	3.64577
18	0.68836	1.33039	1.73406	2.10092	2.55238	2.87844	3.61048
19	0.68762	1.32773	1.72913	2.09302	2.53948	2.86093	3.57940
20	0.68695	1.32534	1.72472	2.08596	2.52798	2.84534	3.55181
21	0.68635	1.32319	1.72074	2.07961	2.51765	2.83136	3.52715
22	0.68581	1.32124	1.71714	2.07387	2.50832	2.81876	3.50499
23	0.68531	1.31946	1.71387	2.06866	2.49987	2.80734	3.48496
24	0.68485	1.31784	1.71088	2.06390	2.49216	2.79694	3.46678
25	0.68443	1.31635	1.70814	2.05954	2.48511	2.78744	3.45019
26	0.68404	1.31497	1.70562	2.05553	2.47863	2.77871	3.43500
27	0.68368	1.31370	1.70329	2.05183	2.47266	2.77068	3.42103
28	0.68335	1.31253	1.70113	2.04841	2.46714	2.76326	3.40816
29	0.68304	1.31143	1.69913	2.04523	2.46202	2.75639	3.39624
30	0.68276	1.31042	1.69726	2.04227	2.45726	2.75000	3.38518
31	0.68249	1.30946	1.69552	2.03951	2.45282	2.74404	3.37490
32	0.68223	1.30857	1.69389	2.03693	2.44868	2.73848	3.36531
33	0.68200	1.30774	1.69236	2.03452	2.44479	2.73328	3.35634
34	0.68177	1.30695	1.69092	2.03224	2.44115	2.72839	3.34793
35	0.68156	1.30621	1.68957	2.03011	2.43772	2.72381	3.34005
36	0.68137	1.30551	1.68830	2.02809	2.43449	2.71948	3.33262
37	0.68118	1.30485	1.68709	2.02619	2.43145	2.71541	3.32563
38	0.68100	1.30423	1.68595	2.02439	2.42857	2.71156	3.31903
39	0.68083	1.30364	1.68488	2.02269	2.42584	2.70791	3.31279
40	0.68067	1.30308	1.68385	2.02108	2.42326	2.70446	3.30688

The formula of T-table is:

Df = n – K

Note:

Df = Degree of Freedom

n = Sample of the Research

K = Variable of the Research

Answer:

Df = 36 – 2

Df = 34

APPENDIX 10

The Research Letter

PEMERINTAH PROVINSI JAMBI
DINAS PENDIDIKAN
SEKOLAH MENENGAH ATAS NEGERI 11 KOTA JAMBI
TERAKREDITASI A
Jl. Sersan Anwar Bay Kel. Bagan Pete Kec. Alam Barajo Kode Pos 36129 ☏ (0741) 583044
Website : www.sman11kotajambi.sch.id E-mail : sman11_jambi@yahoo.co.id
NSS : 301 1000 07 009   NPSN : 10504587

SURAT KETERANGAN
Nomor : 420/\53/SMAN.11/III/TAS-2023

Yang bertanda tangan di bawah ini :

Nama   : **Drs. Alasan Poltak Parulian Sitorus, M. Pd**

Jabatan   : Kepala SMA Negeri 11 Kota Jambi

Dengan ini menerangkan bahwa   :

Nama   : **Windi Tri Maiharani**

NIM   : 1900888203022

Program Studi   : Pendidikan Bahasa Inggris

Telah melaksanakan Penelitian sebagai Tugas Akhir di SMA Negeri 11 Kota Jambi. Dengan judul :

"THE EFECT OF USING MIND MAPPING TECHNIQUE TOWARDS STUDENT'S WRITING ABILITY AT TENTH GRADE OF SMAN 11 JAMBI CITY".

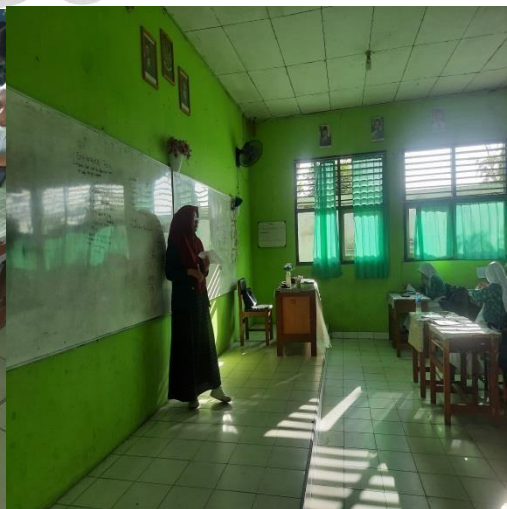Demikian surat keterangan ini kami berikan untuk dipergunakan sebagaimana mestinya.

Jambi, 06 Maret 2023
Kepala Sekolah,

Drs. Alasan Poltak Parulian Sitorus, M. Pd
Pembina Tk. I / IV b
NIP. 19661201 199303 1 005

APPENDIX 11

Documentation

CURICULUM VITAE

WINDI TRI MAIHARANI was born in Muaro Bungo on Mei 12th, 2001. She is the third of four daughters of Mr. Nasrun and Mrs. Darmalina. She has two older sisters and one little sister. She started education by entering TK Islam Diniyyah Muaro Bungo (graduated in 2007), then formal education at Elementary School SDIT Diniyyah Muaro Bungo (graduated in 2013), after graduated in elementary school she went to study at Junior High School MTSN 1 Muaro Bungo (graduated in 2016). Furthermore, she entered Senior High School Number 2 Muaro Bungo (graduated 2019). Then, she continued to University of Batanghari Jambi (entered 2019) as the student of English Language Education Study Program of Teacher Training and Education Faculty. During her study in University of Batanghari Jambi, she joined in organization, which is Himpunan Mahasiswa Bahasa Inggris (HIMABING). Therefore, she participated in Practical teaching at Senior High School Number 11 Jambi City, until she completed her undergraduate thesis entitled "The Effect of Using Mind Mapping Technique towards Student's Writing Ability at Eleventh Grade of Senior High School Number 11 Jambi City"