THE EFFECT OF USING MIND MAPPING TECHNIQUE ON THE STUDENTS' ACHIEVEMENT IN WRITING PERSUASIVE PARAGRAPH.

SKRIPSI

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English Educational Program

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ABSTRACT

Yoan Chintia, 1302050103 : " The Effect of Using Mind Mapping technique on the Students' Achievement in Writing Persuasive Paragraph". Skripsi : English Departement, Faculty of Training and Education, University of Muhammadiyah Sumatera Utara. Medan, 2017.

The objective of this research was investigate the significant effect of using Mind Mapping Technique on the Students' Achievement in Writing Persuasive Paragraph to X grade students of SMK PAB 2 Helvetia Medan at Jalan Veteran psr IV Helvetia, KecamatanLabuhan Deli, Kabupaten Deli Serdang 2016/2017 academic year. This research used the experimental research. The population of this research was 137 students of X AK^1, X AK^2, X AK^3, X AK^4, X AK^5. The sample was taken by random sampling technique, the researcher took X AK^1 and X AK^2 as the sample. Thus, the total of sample were 51 students'. The sample was divided into two groups namely experimental group which consist of 24 students and control group which consist of 27 students. The experimental group was taught by using Mind Mapping Technique, while the control group was taught by using lecture method. The instrument in collecting data was collected by using written test about persuasive paragraph and scoring the students' answer sheet based on five indicators in scoring written test. After the data has been collected, they were analyzed by using t- test. The result showed that t_c= 17.5 was higher than t_t = 1.68. The level of significance was 0.05 for two t-test (17.5 > 1.68). Based on the result of the analysis, the alternative hypothesis (H_a) was accepted and null hypothesis (H_0) was rejected. Therefore, it was found that Mind Mapping technique significantly effects to the students' achievement in persuasive paragraph.

Keyword : Mind Mapping, Writing, Persuasive Paragraph and Achievement.

ACKNOWLEDGMENTS

بسم الله الرحمن الرحيم
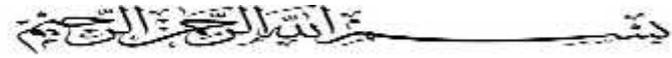
Assalamu'alaikumWr. Wb

In the name of Allah, the most beneficent, the most merciful, praise to Allah the Lord of Universe. Firstly, the researcher would like to thanks to Allah the most almighty who had given her the chances in finishing this skripsi. Secondly, bless and peace was upon the prophet Muhammad SAW as afugure of good civilization, intellectual, braveness, loving knowledge. That's why the researcher has enough ability in writing study.

In writing this study entitled " The Effect of Using Mind Mapping on the Students' Achievement in Writing Persuasive Paragraph", with the purpose for submitting in partial fulfillment of the requirement for degree in Study Program of English Department, there were so many obstacles faced the researcher a certainly without help for many people, especially the following people. It was difficult for the researcher to accomplish this study. Thus, the researcher would like to express her thanks first to her deasertparents**Mr. Suriono** and**Mrs. Suriyatni**, for their pray, advice, courage, moral and material support from she born until forever.

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Medan,   April 2017

The Writer

YOAN CHINTIA

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CHAPTER 1

INTRODUCTION

A. The Background of the Study.

In teaching persuasive paragraph by using Mind Mapping technique estemeted was useful for the students SMK Swasta PAB 2 Helvetia Medan 2016/2017 academic years at Jalan Veteran psr IV Helvetia, Kecamatan Labuhan Deli, Kabupaten Deli Serdang. The follows are a few of research by using Mind Mapping in teaching learning ; By using Mind Mapping technique can improve writing skill on journal a study Wai Ling (2004) revealed that most students found Mind Mapping to have considerable value as a pre-writing planning strategy. They believed that it enabled them to plan more organised and systematic points, generate more ideas, order these ideas much easier, improve the clarity of ideas, decide the number and structure of paragraphs to be included and write faster by following the framework of the Mind Mapping. Findings from an investigation by Al-jarf   (2009) revealed that the written work produced by using Mind Mapping included:

1. More relevant detail and better organised and connected ideas.
2. Mind Mapping raised the performance of the students at all levels of ability as they became more afficient in generating and organising ideas for their writing.

3. Those studied also displayed a positive attitude towards using Mind Mapping as pre- writing activity.

Mind Mapping as fosters creativity, when Mind Mapping was used as a brainstorming exercise to identify the major curricular issues in turkey. It was apparent from the outcome that both the quality and quantity of the issues generated had improved. Students reported that the exercise enabled them to perceive all the concerns together as they were related to each other and they enjoyed expressing their opinions within a participative climate. The use of Mind Mapping software also allowed students freedom to reflect, make changes and develop relationships in line with their thinking process (paykoc et al, 2004). Mind Mapping supports effective teaching, Boyson (2009) states that using Mind Mapping for lesson planning can help teachers identify a logical teaching route and increases recall of subject matter. This can boost teaching confidence and facilitate the smooth running of lesson. A study by Polsen (2003/2004) proved that using Mind Mapping as a pedagogical strategy led to improvements in pupils learning. This was primarily built on helping them to develop sound categorisation skills and then supporting them in depicting this information within a visual format. The study also revealed that the applications and advantages of Mind Mapping have cross curricular qualities, and be potentially applied across all ranges and learning abilities. Mind Mapping helps your plan and organise, A study by Holland (2003/2004) found Mind Mapping to be a useful technique for helping students plan and structure their essays and project more effectively. Students were able to improve the structure, coherence and, consequently, the

quality of their written work and were able to draw value from the technique for project managing pratical work. Mind Mapping encourages critical thinking and problem-solving, while using Mind Maps to teach social problems analysis, Peterson and Snyder (1998) discovered that the technique had several benefits in helping students build an understanding of basic social science thinking. Mind Maps allowed students to literally "see" the independent, dependent and intervening variables involved in a social problem. They also promoted critical thinking and bought about appreciation for diverse approaches to the same issue. Furtermore, they permitted effective problem-solving and enabled students to correctly identify where further information was needed. Mind Mapping enhances learning, Goodnough and Woods (2002) states that discovered that students perceived Mind Mapping as a fun, interesting and motivating approach to learning. Several students attributed the fun aspect to the opportunity to be creative when creating Mind Maps through a lots of choice in colour, symbols, key words and design. Therefore the researcher have some problem when PPL (Teaching Program Learning) at SMK 2 PAB Helvetia Medan, Most of the students thought that English written would be the most difficult subject. Besides that, every students has different feeling and though towards a lesson especially English. Students was think the lesson is essay or difficult, boring or intersting, depend on how they learn it. Most of the students do not know how to do free writing and them less vocabulary and grammar in writing; so they cannot express their ideas on writing especially in persuasive paragraph. Students have no ideas

to make a Topic in writing persuasive paragraph. Students have no motivation in learning english.

The firstly reason, based on researcher's experience when PPL at SMK PAB 2 Helvetia Medan, most of students think that English written is the most difficult subject, especially in writing persuasive paragraph. Because they have no imagination or ideas to write, they do not know what suppose be writing and they lack of vocabulary and tenses. In this case, the students have to study hard to mastery it and teacher should create a good atmosphere in class. Teachers should help their students to overcome these problems by motivating them in writing skill and applied a strategy or media in teaching writing skill. Which is Strategy useful in teaching writing by using Mind Mapping technique support effective teaching in the class, the students can make easier in writing, because the teacher can guide the students to write a persuasive paragraph on the teacher practice. this fact is supported Boyson (2009) stated that using Mind Mapping for lesson planning can help teachers identify a logical teaching route and increases recall of subject matter. This can boost teaching confidence and facilitate the smooth running of lesson.

Secondly, based on the researcher's teaching experience previously, the researcher found problem. Every students has different feeling and though towards a lesson especially English, students think this lesson is easy or difficult, boring or interesting, depend on how they learn it. And it also depends on how the teacher delivers the material. When the students learn to write most of them found unfamiliar words and they usually could not imagine the words that they want to

write. To solve this problem, the teacher should choose and applied the method and strategy which is appropriate to the classroom atmosphere. Beside that teacher should have and applied technique as media in teaching learning in the clssroom atmosphere. The mind mapping strategy is one of the teachers' strategies in teaching. Not only Mind Maps show facts, but also show the overall structure of a subject and the relative importance of individual parts of it. It helps students to associate ideas, think creatively, and make connections that might not otherwise make (Tony Buzan, 2010). As Alamsyah (2009) explained that Mind maps work well as their visual design enables students to see the relationship between ideas, and encourages them to group certain ideas together as they proceed. Mind maps work especially well when created in groups, since the discussion this engenders aids the production of ideas, and makes the task livelier and more enjoyable. The mind mapping strategy can be used to explore almost any topics in writing and also used in every kind of writing such as : narrative, descriptive, recount, persuasive, argumentative, essay etc. Students can improve their ideas and lend themselves to discussing ideas in groups.

Thirdly, based on standard competence in syllabus of second year's students of senior high school called KTSP (Kurikulum Tingkat Satuan Pendidikan), students are expected to reveal the meaning of meaning of the text and short essay writing simple funcational form of persuasive to interact with their suuroundings. However writing is still in problem, Most students do not know how to do free writing and them less vocabulary and grammar in writing; so they cannot express their ideas on writing especially in persuasive paragraph. And

what is more, it is suitable with the meaning of persuasive paragraph be called as hortatory exposition, and argumentative paragraph be called as analytical exposition. Excerpted by Dr. I Wy. Dirgesyasa, M.Hum in his book about writing a genre based perspective. Exposition have two variant texts : 1. Analytical exposition and 2. Hortatory exposition, in analytical exposition is a text that elaborates the writer's idea about the phenomenon surrounding. Its social funcation is to persuade the reader that the idea is important matter. And to analyze a topic and to persuade the reader that is opinion is correct and supported by arguments. Hortatory exposition is type of spoken or written text that is intended to explain the listeners that something should or should not happen or be done. By using Mind Mapping strategy can improve writing skill on a study Wai Ling (2004) in Mind Mapping Scientific Research and Studies states that revealed that most students found Mind Mapping to have considerable value as a pre-writing planning strategy. They believed that it enabled them to plan moe organised and systematic points, generate more ideas, order these ideas much easier, improve the clarity of ideas, decide the number and structure of paragraphs to be included and write faster by following the framework of the Mind Mapping.

The fourth, topic was important. Writing have funcation means to convaying ideas, feeling and intention to other people. It was very important skill on daily life. In fact, most of the students did not like doing this activity and they always tried to avoid it and the teacher don not give them motivation in learning activity. Before writing activity, they appered some assumption in their mind that

they would make mistakes, especially in grammar and vocabulary mastery. Therefore, they would produce bad writing. In short, many students get trouble in writing and some of them are even frustrated when they had to do it. In this case, it was very important for the teacher make writing easier and teacher must be give students motivation in learning activity, by encouraging and supporting the students to do it. In order to help the students to build up their positive toward writing. Teacher not only give them motivation in teaching and learning writing but teacher must have a strategy and media. The Mind Mapping is one of a strategy is useful in learning activity as Mind Mapping enhances learning, Goodnough and Woods (2002) states that discovered that students perceived Mind Mapping as a fun, interesting and motivating approach to learning. Several students attributed the fun aspect to the opportunity to be creative when creating Mind Maps through a lots of choice in colour, symbols, key words and design.

Finally, the researcher concluded that Mind Mapping Strategy could persuade the students to express their ideas so they will write the story more easily. It motivated and interest them in learning English, it could be an enjoyable way of finding an idea throug the imagination. The students would not feel bore in learning, it could help the students establish the link between words and meaning, it also could be as an alternative method or strategy in teaching writing persuasive paragraph, the students could grasp how way the writing easily without a give its topic. Based on the reasons above, the researcher tent to choose the study entitle **"The Effect of using Mind Mapping Technique on the students' Achievement in Writing Persuasive Paragraph"**

B. Identification of the Problem

Based on the background previously above, the problems of this research can be identified as follows :

1. The students still has low achievement in writing persuasive paragraph.
2. The students could not express their ideas on writing.
3. The students less of vocabulary and grammar.
4. The students was confused and did not understand or not intersting
5. The students have no motivation in writing.

C. The Scope and Limitation

Based in identification of the problem stated above and then the scope was focused in writing skill and the researcher was limited in persuasive paragraph at second years students of SMK PAB 2 Helvetia MEDAN 2016/2017 academic years.

D. The Formulation of the Problem

The problem of the research was formulated as the following :

1. Is there any significant effect of applying mind mapping technique on the students' achievement in writing persuasive paragraph ?
2. What are the students' difficulties in writing persuasive by using mind mapping ?

E.   The Objective of the Study

The objectives of the study was state as follow :

1. To find out significant effect of mind mapping technique and on the students' achievement in writing persuasive paragraph.

2. To find out the students' difficulties in writing persuasive by using mind mapping .

F.   The Significance of the Study

After completing this study, it was expected that findings of the study would be useful for :

A. Theoretically

1. As reference for those who concern with teaching English to help their possen' variety of strategy in teaching process, especially strategy in teaching writing.

2. According to Boyson (2009) on his journal the use of Mind Maps in teaching and learning was examined in three different ways :

    a. Using Mind Maps as note – making tool in developing the teacher's own subject knowledge.

    b. Using Mind Maps to present information to students in lesson.

    c. Introducing Mind Mapping as a note – making format for students.

From the perspective of the teacher, using Mind Mapping for the planning brought about increased and understanding of module objective, helped in identifying a logical teaching route and increased recall of the subject matter.

A. Practically

1. For the Headmaster, the headmaster should be attention of teaching strategy in the school, could increase awareness of teacher in order to give an effective strategy for students so that the students don't get bored.

2. This research was expected to be useful for English teachers in SMK PAB 2 Medan Helvetia, to improved their quality in teaching writing a persuasive paragraph by using mind mapping strategy. They will get experience of using mind mapping technique and video animation as media in teaching and learning process that can help them solve the difficulties in teaching and learning writing persuasive paragraph.

3. The students in SMK PAB 2 Medan Helvetia, the result could make them easier to understanding in writing.

4. The other researcher, to master the achievement in writing, morever, other researcher as a guide to study the futher analysis.

5. To English Departement of UMSU, it encouraged and motivated candidate to be teacher to increased their technique of teaching writing a persuasive paragraph by using mind mapping strategy.

CHAPTER II

THE REVIEW OF LITERATURE

A. Theoretical Framework

In doing a research, the terms used must be clarified in order to have a clear perspective of the implementation in the field . the terms may funcations to give a limited concept which is specifically meant in a particular context. By doing so, the research will be free from unnecessary interpretation of the readers. In the case, it is very important to list the following terms for the purpose of the research.

1. Description of the Effect

The effect is language teaching technique according to Richard and Platt (1992 : 133) said, " Effect is defined to change of ability that students have after being treated by using certain technique of teaching". It was usually in experimental method in which an idea or hypothesis was tested or viewed by setting up situation in which the relationship between different subject or variable could be determined

2. Approach, Strategy, Method, and Tehnique.

To be successful in teaching and learning process, there are some important points to be considered. Some of them are presented as follows:

a. Approach

Approach can be interpreted as a starting point or the view of the learning procces, which refers to a view of the occurence of a process that are still very common, in it embodies, inspires, strengthens, and underlie learning methods with a particular theoretical coverage. Judging from his approach, there are two types of learning approaches, namely : (1) learning – oriented approach or centered on the students (students centered approach)and (2) learning – oriented approach or teacher – centered (teacher centered approach).

According to harmer (2001 : 78), "approach describes how people require their knowledge about conditions which will promote successful learning, and approach is a way of doing something". Then, Setiady (2006 :8) states that an approach is a set of correlative assumptions dealing with the nature of language and the nature of language learning and teaching.

There are three principal of approaches, they are :

1. The structural view treats language as a system of structurally related elements to code meaning (e.g. grammar)

2. The functional view sees language as a vehicle to express or accomplish a certain funcation, such as requesting something.

3. The interactive view sees language as a vehicle for the creation and maintenance of social relations, focusing on patterns of moves, acts, negotiation and interaction found in conversational exchanges. This approach has been fairly dominant since the 1980s.

   b. Strategy

Strategy is a plan design for particular purpose. It is also defines that strategy is specific method of approaching a problem task, model of operation for achieving a particular, and planed design for controlling and manipulating certain information.

c. Method

Brown (2001 :14) stated that method is an umbrella term for the specification and interrelation of theory and practice. A method is the practical realization of approach. The originators of a method have arrived at decisions about types of activities, the role of teacher and learners, the kinds of material which will be helpful, and some model syllabus organization.

d. Technique

Brown (2001:16) said that a technique is the specific activities manifested in the classroom that were consistant with a method and therefore were in harmony with an approach as well. Any of a wide variety of exercise, activities, or explain that technique refers to the procedure that describes how realized its approach and design in the classroom.

3. Description of Student Achievement

According to Johnson, K (2001:282) said that "the students" achievement is concerned with how a students has formed in relation to a particular course of program. They usually come at the end of the program, and deliberate based on the content covered it in. Achievement test is useful to the teacher as well as the

student. They indicated how well teaching has success and improvements need to be made.

Procter (2006 :7) explained the word "achievement" derives from a verb "achieve" which means :

1. To finish successfully especially for something anything
2. To get as the result an action
3. Gain the something students' achievement means the successfully of the students in finishing or gaining of something successfully finished or gained through skill and hard work.

From the explaination above, can be concluded the students' achievement is the result or what students have done using their effort and their skill in doing or finishing something.

4. Mind Mapping technique

The mind mapping strategy is one of the teachers' strategies in teaching. Not only Mind Maps show facts, but also show the overall structure of a subject and the relative importance of individual parts of it. It helps students to associate ideas, think creatively, and make connections that might not otherwise make (Tony Buzan, 2010).As Alamsyah (2009) explained that Mind maps work well as their visual design enables students to see the relationship between ideas, and encourages them to group certain ideas together as they proceed. Mind maps work especially well when created in groups, since the discussion this engenders aids the production of ideas, and makes the task livelier and more enjoyable. The

mind mapping strategy can be used to explore almost any topics in writing and also used in every kind of writing such as : narrative, descriptive, recount, persuasive, argumentative, essay etc. Students can improve their ideas and lend themselves to discussing ideas in groups.

4.1 Advantages and disadvantages of Mind Mapping tools

4.1.1 Advantages of using mind mapping

a. Speed : you can develop ideas fast. This is cause you draw your ideas in the form keywords shapes, and arrows. You can review your ideas fast, too, as you dont have to skim through different pages of notes. All information is in one page, a single shhet of paper.

b. Remember more : it is widely accepted that a mind map can greatly stimulate your brain in new ways than normal lineae notes can't. Using mind mapping tools enable you to generate a lot more new ideas, identify the right relations among the information stored in your brain and ultimately improve your retention. Mind maps give you the freedom to think out of the box and stay creative all day long. Ultimately, you will be able to remember up to six times more thanks to the use of both images and words.

c. Eases the study process and makes it fun : one of the biggest advantages of mind mapping tools is that you can use them to make studying a breeze. Not only that you will learn faster, but you will also be able to have fun along the way. The use of colors, keywords and images can boost your

creativity while giving you a feeling of happiness and self-content. Once you begin to like your new activity, you will become more motivated to remember all those those important details.

d. Perfect overview of your ideas : probably the biggest advantages of mind maps is that they help you create a deeper understanding of the topic of interest, which means you will get a perfect overview of all related ideas, concepts and thoughts.

e. Connected facts : mind mapping tools teach you how to focus on relationships and links that exist between ideas in order to help you get connected facts. This way you won't have to deal with disconnected facts that can stop you from reaching your goal.

4.1.2 Disadvanteges of using Mind Mapping.

a. Difficult to use by people who are extremely logical : mind mapping can be extremely useful in a brainstroming session, as it encourages creativity and innovation. However, logical people might find it hard to trust their creativity or intuition, because logical is the dominant side of their thinking pattern.

b. Takes time : the truth is that creating a mind map can take a lot of precious time. Unfortunately, time is an asset most of us lack.

c. Might be difficult for others to understand : once you have created and personalized your map, it might be difficult for those around you to understand all your ideas and concepts.

4.2   Step to Download Free Software Mind Mapping

1. You must open browsing or using internert (geoogle)
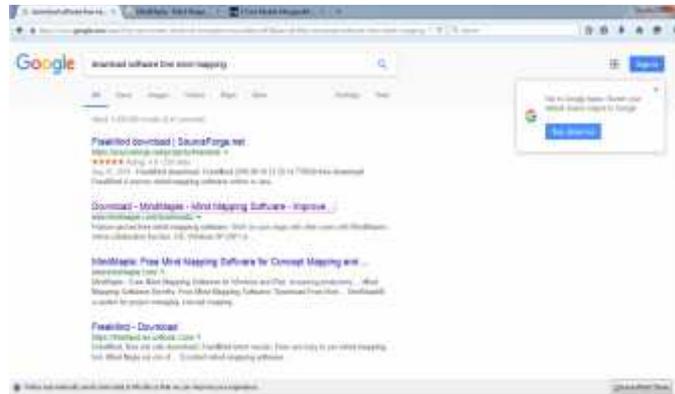
2. Choose one of this statement

3. After that appear slide as that and click Mind Mapping Lite

4. Click ok. And next click ok until this software installed in your computer

5. The last installed software of Mind Mapping in your windows
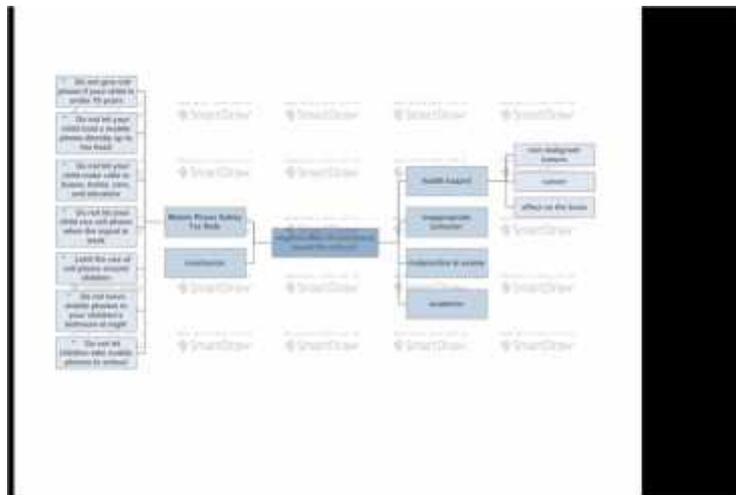
4.3 The Applying Mind Mapping Strategy in Persuasive Writing.

There are some steps to apply Mind Mapping technique as follow :

a. Teacher gave the students a plan of mind mapping of problems about the denger mobile phone for childhood.

b. Teacher gave instruction before them doing this excercise, about dangers mobile phone for childhood.

c. Students wrote arguments and recommendation by using mind mapping in note book and they can persuade the reader

5   Writing

Heaton (1975) stated writing skill are complex and difficult to teach, requiring mastery not only the grammatical and rhetorical devices but also conceptual and judgments elements. According to him, there are five main areas of writing skill that the students must be mastered, which are :

1. Language use : the ability to write correct and appropriate sentences.

2. Mechanical skill : the ability to use correctly those conventions peculiar to the written language, example : punctuation, spelling.

3. Treatment of Content : the ability to think creatively and develop thoughts includings all the relevant information.

4. Stylistic skill : the ability to manipulate sentences and use language effectively.

5. Judgment skill : the ability to write in an approapriate manner for a particular audience in mind, together with an ability to select, organize and order relevant information.

Basically, according to Hyland (2002) writing can be defined into three definition, which are :

1. Writing as personal expression

   Writing is learnt, not taught, and the teacher's role in to be non – directive and facilitating, providing writes with the space to make their own meanings through an encouranging, positive, and cooperative enviroment with minimal interference to find their own voice to produce writing that is

fresh and spontaneous. This is for encouraging self discovery and cognitive maturation.

2. Writing as a cognitive process

Focuses on the cognitive aspects of writing and sess writing as essentially a problem – solving activity, where is the writes discover and reformulate their ideas as they attempt to approximate meaning. Zamel (1983 : 165) the process of writing is influenced   by task environment and the writer's long term memory.

3. Writing as a situated act

Emphasis to the actual performance of writing in a particular context. Writing is seen as a social act that can only occur within a specific situation. It is therefore influenced both by the personal attitude and social experiences that the writes bring to writing. This is significant attention to the experiences of the writes and to their understanding of the local faetures of context they deal with a they writ

5.1   The Parts of Writing

Based on Smalley (1986:3-21) states that there are some parts of writing.

a. Topic sentences

A topic sentences is a sentences whose main ideas or claim controls the rest of the rest of the paragraphs, the body of a paragraph explains, develops or support with evidence the topic sentence is usually at the first paragraph, but not necessarily, is often begins a paragraph or is found near the beginning of the

paragraph. So, topic sentence has a particular funcation to introduce the topic and the controlling idea.

b. Controlling idea

Controlling idea is the main idea that writer is writer is developing in a paragraph. The controlling idea usually express a definite opinion or attitude about the topic of the paragraph.

c. Supporting sentences

Supporting sentences come after the topic sentences. Supports are the number of sentences that is used to back up, analyze, develop, and prove of the topic sentences. It funcation to give details to develop and to support the main idea of the paragraph. Supporting sentences are useful to provide a fuller explanation of the topic sentences.

d. Conclusion sentences

Conclusion sentence is often called closing sentences, which usually appear in the last sentence of aparagraph. To make a conclusion sentence, the main idea of the paragraph is resulted using different words. Conclusion sentence shows the conclusion of the paragraph.

e. Unity

A good paragraph should have unity. It means that every sentence in the paragraph contributed to develop one control idea, concerning in the topic

sentences. A unity make clear ending. It make the reader easy to folow the writer's thought.

    f. Coherence

Coherence is the term used to refer to the way in which sentences and group of sentences in a text make sense in relationship each other. It means that each sentences in a paragraph is closely related to the next so that readers can take the ideas logically and smoothly.

    g. Organization

Paragraph should be organized. Begins our paragraph with a topic sentence that announces the idea of the paragraph.

    h. Smooth flow

Smooth flow refers to how well one idea sentence leads into another. Smooth flow can be achieved through sentence combining and through the certain expressions.

5.2 Types of Writing.

According carol (2001:14) says that there are some types of writing thry are :

    1. Description

Description is type of writing which describes something in details in order to enable the readers to see, hear, feel, and touch it directly or involve themselves in the event. The writer transforms his/her messages, observation result and feeling

to the readers' though a description. In this case, a writer must be able to describe an object based on it specific characterization in details.

2. Narration

Narration is a type of writing which tells an event or process chronologically in certain time. This writing involves two dominant elements : time and action. Narration focused on the time and action of an event or process. This type usually answers the question: "what happen ?" the main goal of narration is to explain the clear information about phrases, steps and chronological order of an event or process.

3. Exposition

This wrting is intended to explain or inform something in order to enlarge reader's horizon, knowledge and science. It is supposed to tell something, not to influence reader's perception. It is often used to explain the nature of an object and elaborate the correlation between an object to others.

4. Argumentation

It is intended to influence reader's opinion, attitude and their way of thinking to do whatever the writer wants. The writer needs some effort to convince the audience by providing some available reasons and proof logically. There are some facts must be provided in this type to persuade reader's attention.

5. Persuasion

This type of writing tries to get the win or agreement from the readers. It needs a lot emotion so that make this writing to be illogical as its weakness. It just needs a few of a facts. In this matter, the most important point is how to comprehend readers' feeling and emotion so that they can agree with writer's opinion. An agreement is goal of this writing.

5.3 Description of Persuasive Writing.

The word exposition is sometimes interchangeably used with *persuasive writing*. It is used to present a logical argument from a particular point of view. This genre will often involve the writer comparing opposite points of view, analysing the arguments and concluding with an overriding opinion or conclusive argument.

In terms of use, expository writing is probably the type most frequently used in college courses (Bander,1983). However, this also holds true at the senior high school level. As expository writing calls for logical analysis, students need explicit instruction in how to organize their writing, present ideas which are logically related to the main topic, and weave sentences together in a smooth way.

It is generally known that the social funcation or communicative purpose of argumentation (also called *persuasive writing)* is to prove the validity of an idea, or point of view, by presenting sound reasoning, discussion, and argument that thoroughly convince the reader. Or, the exposition is used to persuade the readers or the listeners that something is the case, to analyze or to explain. Persuasive writing is a type of argumentation with the additional aim to urge the

reader to take som e form of action. Example include : Adverstising copy, Critical review, Editorials, Job evaluation and etc.

According to Siahaan and Shinoda (2013), persuasion is a written English text in which the writer persuades people that something should or should not be the case.

Persuasion is a text containing three components i.e., the thesis, argument of issue of concern, and recommendation by which a writer persuades people that something should   or should not be the case.

Text Funcation

To persuade the reader that something should or should not be the case.

Text Structure

1. Thesis   : Announcement of issue of concern
2. Arguments   : Reasons   for   concern,   leading   to   the   recommendation
3. Recommendation   : Statement of what ought or ought not happenned.

Dominant Grammatical Aspects.

1. Focus on generic human and non- human participants, except for speaker or writer referring so self.
2. Use of

a. Mental Processes : to state what writer thinks or feels about issue e.g. realize , feel, appreciate.

b. Material Process : to state what happened e.g. is polluting, drive, travel, spend, should be treated.

c. Relational Process : to state what is or should be e.g. doesn't seem to have been,

d. Use of simple present tense.

A. Conceptual Framework.

In English teaching, Writing is basic need which the one of important thing to learn English language. When the students want to learn English, they should be write first, so that they are know what they want to say. But sometime the writing skill is one of the bored lesson to them if the teachers just give the materials about writing without using some strategy or method and media.

The teachers must to have an alternative method or strategy and using media to teach this subject, one of them is Mind Mapping strategy to motivation of them in writing skill. Mind Mapping is one of the very best strategy to optimize ones learning capacities and understanding of how the elements of complex structures are connected.besides that Mind Mapping is one of the strategy   in teaching is will be creative for students. In this case, the students were active, creative and motivate in what they want to be written.

B. Hypothesis

Based on the conceptual framework above, the hypothesis can be formulated.

Ha   : There is significant effect of applying Mind Mapping on the students'
achievement in writing persuasive paragraph.

CHAPTER III

METHOD OF RESEARCH

A. Location and Time of Research

1. Location and Time

This research was conducted at SMK 2 PAB Helvetia Medan 2016/2017 academic years on. This research focused in the first year of 2015/2016, the reason for choose this school for the research because based on the total numbers of students SMK 2 PAB Helvetia Medan were 137 students. They came from various areas with different background, age, religion, economic status and characteristic. Besides that, the infrastructures did not unequal to students such as language laboratory, and library. Family background of students was farmer, fisherman, seller, workingman, and enterprenuer. So that, the students still has low achievement in writing persuasive paragraph. Most of them could not express their ideas on writing because they less vocabuary and grammar. They confused and did not understand about writing especially persuasive paragraph. It caused by used of teachers' strategy which always made them bored and did not understand or interesting.

A. Population and Sample

1. Population

This population of   this research was taken form the elevent grade of SMK 2 PAB Helvetia Medan in 2016/2017 academic year, which consists of two parallel classes such as X AK ^{1} consist 24 students᠂ X AK ^{2} consist 27 students, XAK^3 consist 30 students XAK^4 consist 27 students and XAK^5 consist 29, so the entire of the students consist 137 students.

Table 3.1

The Populations of SMA AR RAHMAN MEDAN HELVETIA

No	Class	Population
1.	X AK^1	27
2.	X AK^2	24
3.	X AK^3	30
4.	X AK^4	27
5.	X AK^5	29
	Total	137

2. Sample

The researcher used Random Sampling. In this study, the researcher took 51 students as sample which is divided 24 students into experimental group and 27 students into control group.

Table 3.2

Sample of Research

Class	Population	Sample
XI^2	24	24
XI^1	27	27
Total	51	51

B. Research Design

This researcher used an experimental method which consists of two groups named experimental group and control group. The experimental group was taught by using Mind Mapping technique. The control group was taught without Mind Mapping strategy. Both group gave pre-test and   post-test. The design of this research could show below :

Table 3.3

Research Design

Group	Pre-test	Treatment	Post-test
Experimental	✓	✓	✓
Control	✓	-	✓

: The experimental group, where the samples taught by using Mind Mapping tehchnique.

: The control group, where the samples taught without using Mind Mapping technique.

C. The Instrument of the Research.

The research instrument was written test while Mind Mapping as the technique. The content of the test was the students would be asked to wrote persuasive paragraph. Writing texts were valid because there would be an evidence due to their handwriting, while Mind Mapping could be the application which laptop and infocused the learning activities done by the sample. After they were done, the answer sheets were then be collected for further evaluation.

D. The Techniques of Collecting Data

The data collection was an important part in conduction a research. To collect the data, this research used written test that was gave to the test personal and to see students' ability in writing a persuasive writing in used simple sentence with the problem who occured at this moments. Besides that, this research used pre-test and post-test that was gave to the experimental group and control group. According to Nurgiyantoro (2001:65), pre-test was a kind of test that did before the students learn the material in the teaching learning process. Pre-test was aimed to know or to measure students' competency or ability about the material that would be given in the teaching learning process. Post-test was a test which

gave after the treatment or after the teaching learning process. It used to measure the effect of treatment. It was given to those two groups: experimental and control class. There were some steps as follows :

1. **Pre - Test**

Both of two groups, the experimental and control group was given before the treatment. The funcation of pre- test was to know the mean score of experimental group and control group. In pre-test, the teacher asked the students to make one paragraph which, the students wrote persuasive paragraph based on the litle gave.

2. **Treatment**

Two know the teacher and students' role play of teaching in the class, it was important to know the teaching activities. The students were taught about writing persuasive paragraph by using mind mapping . This research are two classes, they are experimental class and control class. It means that the teacher will use the same test in teaching persuasive paragraph in experimental class and control class. But the teacher used different method in control class without using mind mapping teachnique. The treatment consists of 3 (three) meeting for each class included pre-test and post-test.

No.	Teachers Activities	Students Activities
1.	The teacher explain about persuasive writing by using concept mind mapping technique.	The students gave response to the teacher.

2.	The teacher gave the students a topic has been prepared by the teacher.	The students choose the interesting topic that they like
3.	The teacher asked to them about the topic. What is difficult or easy ?	before they write it.
4.	The teacher asked students to wrote persuasive paragraph by using concept of Mind Mapping who have made by teacher.	The students wrote persuasive paragraph based on concept of mind mapping.
5.	The teacher collected the sheet paper and gave conclusion	The students gave feedback about the material

3. Post-Test

The post-test was given to both groups, experimental and control group after the treatment have completed. In order to, know their mean score of experimental group and control group after reveicing treatment. The writer used post-test to know the effect of using mind mapping to the students' achievement in writing persuasive paragraph.

E. Technique for Analysis Data

In this research, descriptive quantitative technique applies to analyze the data, and the steps are :

1. Reading the students' answer

2. Identifying the students' answer

3. Analyzing the students' answer based on component that will be presented in analytic scoring rublic for writing, namely : content, organization, vocabulary, language use, and mechanics.

4. Calculating the mean of the students' score by using formula :

$$M = \frac{\sum x}{N}$$

   Where :

   M   : Mean

   $\sum x$: Total students' score

   N   : Total students'

5. Calculating the total post – test in experimental group and the control group.

a. standard deviation for experimental group :

$$S_1 = \sqrt{\frac{n\left(\sum X_1^2\right) - \left(\sum X_1\right)2}{n_1\left(n_2-1\right)}}$$

b. standard deviation for control group :

$$S_{2 =} \sqrt{\frac{n\left(\sum X_2^2\right)-\left(\sum X_2\right)2}{n_2\left(n_2-1\right)}}$$

c. T- test for decide the data was separated varians (heterogenic) or polled variants (homogency).

$$Fc_{=}\frac{S_1^2}{S_2^2} \qquad if \ f_c < f_t, \text{ so the data is polled variants}$$

6. The calculating will be conducted by using T-test as show below, according to Sugiyono (2010) :

   a. Calculating correlation Product Moment between X and Y (sugiyono 2012)

$$r_{xy} = \frac{n\sum X_1 X_{2-}\left(\sum X_1\right)\left(\sum X_2\right)}{\{\,n\sum x1\ 2-\left(\sum x1\right)2\,\}\{\,n\sum x2\ 2-\left(\sum x2\right)2\,\}}$$

   b. Testing hypothesis (sugiyono, 2012)

$$T = \frac{X1 - X2}{\sqrt{\frac{s_1^2}{n_1}+\frac{s_2^2}{n_2}-2r\left(\frac{s_1}{\sqrt{n_1}}\right)\left(\frac{s_2}{\sqrt{n_2}}\right)}}$$

Where:

S_1 :Standard Deviation of Experimental Group

S_2 : Standard Deviation of Control Group

$\bar{X}_1$:Mean Score of sample Experimental Group

$\bar{X}_2$: Mean Score of sample Control Group

n_1 :The amount of sample in Experimental Group

n_2 :The amount of sample in Control Group

7. Statistical Hypothesis

   Based on the problem of the study, the hypothesis is formulated as the following :

   If test   Ttable   Ha is accepted and Ho is rejected

   If test   Ttable   Ha is rejected and $H_o$is accepted

   Ha : There is a significant (the hypothesis will accepted).

   Ho : There is not significant effect of using mind mapping technique on the students' writing achievement   (the hypothesis will rejected).

8. Determining the percentage of the effect x variabel toward y variable using determination formulation :

   $D = (r_{xy})^2$ x 100%

CHAPTER IV

DATA AND ANALYSIS

A. The Data Collection.

There are totally seventy students who were taken as the sample. They were divided into groups, namely experimental group and control group. The data collection used five indicator that refer to the rule of writing, that were :

Cont   : Content

Org   : Organization

Voc   : Vocabulary

Lu   : Language Use

Mec   : Mechanics

And the following the table were the calculation and result of the data student's score on the pre- test and post- test of the experimental and control group.

Table 4.1

The Score of Pre- Test of Experimental Group

No	Students'	Indicator					Pre – test
	Initial	Cont	Org	Voc	LU	Mach	

1.	CDP	15	12	14	12	2	55
2.	DAS	12	17	18	17	3	77
3.	AH	15	10	15	15	2	57
4.	RDN	20	13	14	15	2	65
5.	DD	18	13	10	9	2	52
6.	NA	23	13	14	14	3	67
7.	NI	25	13	13	12	3	66
8.	RH	20	13	14	14	2	63
9.	JS	19	14	16	16	3	58
10.	DMS	23	13	14	14	2	68
11.	SEP	23	14	13	14	3	67
12.	DEP	16	14	13	12	3	58
13.	RY	14	16	14	12	3	59
14.	FY	15	14	16	12	3	60
15.	TSA	18	15	16	14	3	66
16.	EP	14	14	17	15	3	63
17.	IS	18	17	19	14	3	71
18.	NH	23	15	16	12	3	69
19.	SUGP	22	13	14	15	3	67
20.	DRA	23	15	16	12	3	69
21.	IPS	15	13	13	12	3	56
22.	CIN	23	13	14	14	3	67

23.	PSD	26	17	16	14	3	76
24.	LP	18	15	16	14	3	66
Total							1542
Mean							64.25

Based on the data in the table above, it showed that the highest score was 77 and the lowest score was 52, so the total score of pre- test in experimental group was 1542. The mean of pre- test in control was 64,25.

Table 4.2

The Score of Pre- Test of Control Group

No	Students' Initial	Indicator					Pre – test
		Cont	Org	Voc	LU	Mach	
1.	RS	14	9	10	6	3	42
2.	DA	15	12	12	11	3	53
3.	NM	13	11	14	15	2	55
4.	SR	10	11	12	6	2	41
5.	RO	11	13	10	9	2	45
6.	NY	18	14	13	17	3	65
7.	DA	13	10	10	7	2	40
8.	SMN	13	10	12	8	2	45
9.	AML	12	11	10	10	2	45

10.	MSR	14	12	14	11	2	53
11.	PADI	13	7	7	5	2	34
12.	YUNI	18	16	15	18	3	70
13.	IW	13	8	9	8	2	40
14.	SN	14	12	12	10	2	50
15.	AU	14	11	12	9	3	49
16.	FR	13	7	7	5	2	34
17.	RR	13	9	11	10	2	45
18.	RA	13	9	13	5	2	42
19.	UH	15	11	12	13	2	53
20.	WS	16	12	14	6	2	50
21.	SF	14	8	8	10	2	42
22.	FEB	13	7	7	5	2	34
23.	DI	13	7	7	5	2	34
24.	NSR	15	13	12	8	2	50
25.	DSP	13	8	8	5	2	36
26.	SP	13	8	7	5	2	35
27.	SK	16	8	7	6	2	39
Total							1221
Mean							45,22

Based on the data in the table above, it showed that the highest score was 70 and
the lowest scores was 34, so the total score of pre- test in control group was 1221.
The mean of pre- test in control group was 45,22.

Table 4.3

The Score of Post- Test of Experimental Group

No	Students' Initial	Indicator					Post – test
		Cont	Org	Voc	LU	Mach	
1.	CDP	29	19	18	23	4	93
2.	DAS	29	18	18	20	3	89
3.	AH	26	18	19	19	3	85
4.	RDN	25	19	19	19	3	85
5.	DD	29	18	18	21	4	90
6.	NA	23	14	14	24	3	68
7.	NI	24	16	15	15	3	63
8.	RH	22	18	15	20	3	78
9.	JS	24	16	15	15	3	63
10.	DMS	29	18	18	19	3	87
11.	SEP	25	19	19	19	4	86
12.	DEP	29	10	13	15	3	72
13.	RY	29	18	18	22	4	91
14.	FY	25	17	20	18	4	84

15.	TSA	25	17	20	18	4	84
16.	EP	20	16	14	14	4	68
17.	IS	28	18	18	21	3	89
18.	NH	26	16	17	17	4	78
19.	SUGP	15	13	12	13	2	55
20.	DRA	29	18	18	22	4	91
21.	IPS	29	18	19	19	4	89
22.	CIN	26	14	14	19	4	77
23.	PSD	26	15	15	20	4	80
24.	LP	27	19	18	20	4	88
Total							1933
Mean							80,54

Based on the data in the the above, it showed that the highest score was 93 and the lowest score was 55, so the total score of post test in experimental group was 1933. The mean of post test in experimental group was 80,54.

Table 4.4

The Post – Test Score of Control Group

No	Students'Initial	Indicator					Post- test
		Con	org	Voc	LU	Mech	
1.	RS	16	9	16	7	2	50
2.	DA	19	14	16	13	3	65

3.	NM	17	13	19	15	3	67
4.	SR	11	8	11	13	2	45
5.	RO	14	11	10	16	2	53
6.	NY	19	15	15	17	4	70
7.	DI	14	12	13	9	2	50
8.	SNM	14	13	12	11	2	52
9.	AML	14	13	12	11	2	52
10.	MSR	21	17	19	19	3	79
11.	PADI	12	11	10	10	2	45
12.	YUNI	20	17	19	19	3	78
13.	IW	20	17	18	19	3	77
14.	SN	14	12	14	10	2	52
15.	AU	15	12	13	12	3	55
16.	FR	13	8	9	8	2	40
17.	RR	20	18	17	18	3	76
18.	RA	17	11	13	12	2	55
19.	UH	16	13	13	12	2	56
20.	WS	17	13	14	6	2	52
21.	SF	15	11	10	15	2	53
22.	FEB	15	13	12	8	2	50
23.	DI	15	13	12	7	3	50
24.	NSR	15	11	9	11	2	48

25.	DSP	17	13	16	14	2	62
26.	SP	17	16	14	16	2	65
27.	SK	16	16	12	17	2	63
Total						1560	
Mean						57,77	

Based on the data in the table above, it showed that the highest scores was 79 and the lowest score was 40, so the total score of post test in control class was 1560. The mean of post test in control group was 57,77.

Table 4.5

The Differences of Pre- Test and Post- Test in Experimental Group

No	Students' Initial	Pre test (x_1)	Post test (x_2)	($x_2 - x_1$)
1.	CDP	55	93	38
2.	DAS	77	89	12
3.	AH	57	85	28
4.	RDN	65	85	20
5.	DD	52	90	38
6.	NA	67	68	1
7.	NI	66	63	3
8.	RH	63	78	15
9.	JS	58	63	5

10.	DMS	68	87	19
11.	SEP	67	86	19
12.	DEP	58	72	14
13.	RY	59	91	32
14.	FY	60	84	24
15.	TSA	66	84	18
16.	EP	63	68	5
17.	IS	71	89	18
18.	NH	69	78	9
19.	SUGP	67	55	12
20.	DRA	69	91	22
21.	IPS	56	89	33
22.	CIN	67	77	10
23.	PSD	76	80	4
24.	LP	66	88	22
Total		1542	1933	= 421
Mean		64,25	80,54	

based on table 4.5 showed that the mean of pre- test in experimental class was 64,25 and the mean of post- test in experimental class was 80,54. The highest score of pre-test in experimental class was 77 and the lowest score was 52. While, the highest score of post- test in experimental class was 93 and the lowest score of post- test was 55.

Table 4.6

The Difference Score of Pre- Test and Post- Test in Control Group

NO	Name of Initial	Pre test (x_1)	Post test (x_2)	$x_1 - x_2$
1.	RS	42	50	8
2.	DA	53	65	12
3.	NM	55	67	12
4.	SR	41	45	4
5.	RO	45	53	8
6.	NY	65	70	5
7.	DI	40	50	10
8.	SNM	45	52	7
9.	AML	45	52	7
10.	MSR	53	79	26
11.	PADI	34	45	11
12.	YUNI	70	78	8
13.	IW	40	77	37
14.	SN	50	52	2
15.	AU	49	55	6
16.	FR	34	40	6
17.	RR	45	76	31
18.	RA	42	55	13

19.	UH	53	56	3
20.	WS	50	52	2
21.	SF	42	53	11
22.	FEB	34	50	16
23.	DI	34	50	16
24.	NSR	50	48	2
25.	DSP	36	62	26
26.	SP	35	65	30
27.	SK	39	63	24
Total		1221	1560	343
Mean		45,22	57,36	

Based on table 4.6 showed that the mean of pre- test in control class was 45,22 and the mean of post- test in control class was 57,36. The highest score of pre- test in control class was 70 and the lowest score of pre- test in control class was 34. While the highest score of post- test in control class was 79 and the lowest score of post test in control class was 40.

B. The Data Analysis

After scoring and listing the students' score in experimental class and control class in both of two class, the next step was the data was changed into the table of calculation of standard deviation.

For experimental group :

$$S_1 = \sqrt{\frac{n\left(\sum X_1^2\right) - \left(\sum X_1\right)2}{n_1\left(n_{2-1}\right)}}$$

For control group :

$$S_2 = \sqrt{\frac{n\left(\sum X_2^2\right) - \left(\sum X_2\right)2}{n_2\left(n_{2-1}\right)}}$$

In calculating standard deviation, the table of the score should be changed into the table of calculation of standard deviation. It can be seen in table 4.7 below :

Table 4.7

The Calculation Table of Standard Deviation

NO	X_1	X_2	XI^2	$X2^2$	X_1*X_2	X_1-X_2
1.	93	50	8649	2500	4650	43
2.	89	65	7921	4225	5785	24
3.	85	67	7225	4489	5695	18
4.	85	45	7225	2025	3825	40
5.	90	53	8100	2809	4770	37
6.	68	70	4624	4900	4760	2
7.	63	50	3969	2500	3150	13

8.	78	52	6084	2704	4056	26
9.	63	52	3969	2704	3276	11
10.	87	79	7569	6241	6873	8
11.	86	45	7396	2025	3870	41
12.	72	78	5184	6084	5616	6
13.	91	77	8281	5929	7007	14
14.	84	52	7056	2704	4368	32
15.	84	55	7056	3025	4620	29
16.	68	40	4624	1600	2720	28
17.	89	76	7921	5776	6764	13
18.	78	55	6084	3025	4290	23
19.	55	56	3025	3136	3080	1
20.	91	52	8281	2704	4732	39
21.	89	53	7921	2809	4717	36
22.	77	50	5929	2500	3850	27
23.	80	50	6400	2500	4000	30
24.	88	48	7744	2304	4224	40
25.	0	62	0	3844	0	62
26.	0	65	0	4225	0	65
27.	0	63	0	3969	0	63
Total	$X_1 =$ 1933	$X_2 =$ 1560	$X_1^2 =$ 158237	$X_2^2 =$ 93256	$X_1*X_2 =$ 110698	$X_1 - X_2 =$ 771

Based on the table 4.7 previously, the calculation of standard deviation as below :

For experimental group :

$$S_1 = \sqrt{\frac{n\left(\sum X_1^2\right) - \left(\sum X_1\right)2}{n_1\left(n_2 - 1\right)}}$$

$$S_1 = \sqrt{\frac{24(158237) - (1933)2}{24\ (24 - 1\ )}}$$

$$S_1 = \sqrt{\frac{3797688 - 3736489}{552}}$$

$$S_1 = \sqrt{\frac{61199}{552}}$$

$$S_1 = \sqrt{110.86}$$

$$S_1 = \mathbf{10.52}$$

For control group :

$$S_2 = \sqrt{\frac{n\left(\sum X_2^2\right) - \left(\sum X_2\right)2}{n_2\left(n_2 - 1\right)}}$$

$$S_1 = \sqrt{\frac{27(93256) - (1560)2}{27\ (27 - 1\ )}}$$

$$S_1 = \sqrt{\frac{2517912 - 2433600}{702}}$$

$$S_1 = \sqrt{\frac{84312}{702}}$$

$$S_1 = \sqrt{120.10}$$

$$S_2 = \textbf{10.95}$$

After the score of standard deviation for experimental group and control group was calculated, then it was needed to decide the data was separeted variants (Heterogenic) data or polled variants (Homogeny) data by using the formula below :

$$Fc = \frac{S_1^2}{S_2^2}$$

S_1^2 is standard deviation squared (variants) of sample 1 (experimental group) and S_2^2 is the standard deviation squared (variants) of sample 2 (control group). Based on the data was calculated previously, it was found S_1^2 was 110.86 and S_2^2 was 120.10. Then, for F_C when $F_C < F_t$ so the data was polled variants (homogeny). So, F_C was calculated as below :

$$Fc = \frac{S_1^2}{S_2^2}$$

$$Fc = \frac{110.86}{120.10} = 0.92$$

Then, to find out value of F_t is getting by F distribution for probability $\alpha = 5\% =$ 0,05 degree of freedom (df) for numerator df $= n_I - 1 = 24 - 1 = 23$, and degree of freedom (df) for denominator df$= n_2 - 1 = 27 - 1 = 26$. From table, it was found that $F_t = 1.68$ and $F_c = 0,92$. So, it means that $F_c < F_t = 0.92 < 1.68$. it showed that the data was polled variants (homogeny).

Correlation of Product Moment between X_1 and X_2 :

$$r_{xy} = \frac{n \sum X_1 X_2 - (\sum X_1)(\sum X_2)}{\{ n\sum x1\ 2 - (\sum x1)\ 2 \}\{ n\sum x2\ 2 - (\sum x2)\ 2 \}}$$

$$r_{xy} = \frac{51.110698 - (1933)(1560)}{\sqrt{\{51(158237) - (1933)^2\}\{51\ (93256) - (1560)^2\}}}$$

$$r_{xy} = \frac{5645598 - 3015480}{\sqrt{\{8070087 - 3736489\}\{475606 - 2433600\}}}$$

$$r_{xy} = \frac{2630118}{\{4333598\}\{2322456\}}$$

$$r_{xy} = \frac{2630118}{(2081.72)(1523.96)}$$

$$r_{xy} = \frac{2630118}{3172458.01}$$

$$r_{xy} = 0,82$$

C. The Testing Hypothesis.

The formula of t- test and t- table were applied to test the hypothesis. The calculation of t- test can be seen as follow :

For $\bar{X_1}$ (average of variabel 1 or experimental group) :

$$\bar{X_1} = \frac{\Sigma X_1}{n_1}$$

$$\bar{X_1} = \frac{1933}{24}$$

$$\bar{X_1} = 80,5$$

For $\bar{X_2}$ (average of variabel 1 or control group):

$$\bar{X_2} = \frac{\Sigma X_2}{n_2}$$

$$\bar{X_2} = \frac{1560}{27}$$

$$\bar{X_2} = 57,7$$

T_c between X_1 and X_2

$$T_c = \frac{X1 - X2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2} - 2r(\frac{s_1}{\sqrt{n_1}})(\frac{s_2}{\sqrt{n_2}})}}$$

$$T_c = \frac{80,5 - 57,7}{\sqrt{\frac{110.86}{24} + \frac{120.10}{27} - 2.(0.82)\{\frac{10.52}{\sqrt{24}}\}\{\frac{10.95}{\sqrt{27}}\}}}$$

$$T_c = \frac{22,8}{\sqrt{4.619 + 4.448 - 2(0.82)(2.14)(2.10)}}$$

$$T_c = \frac{22,8}{\sqrt{9.067 - (1.64)(4.494)}}$$

$$T_c = \frac{22,8}{\sqrt{9.067 - 7.370}}$$

$$T_c = \frac{22,8}{\sqrt{1.697}}$$

$$T_c = \frac{22,8}{1.30}$$

$$T_c = 17.53$$

T_c is compared with t_t, the value of t_t got by t distribution critical value table with significant rate $\alpha = 0,05$ with $df = n_1 + n_2 - 2 = 24 + 27 - 2 = 49$. So, t_t was 1,684. It showed that t- test > t- table = 17.53 > 1,684 . it means that H_a was accepted and H_o was rejected. So, it can be concluded that there was any significant effect of using Mind Mapping technique on the students' achievement in writing persuasive paragraph.

Determining the percentage of the effect of X_I towards X_2 :

$$D = (r_{xy})^2 \times 100 \%$$

$$= (0,82)^2 \times 100\%$$

$$= 0.672 \times 100\%$$

$$= 67.2 \%$$

It mean that the effect of X_1 toward X_2 of the effect of using Mind Mapping technique on the students' achievements in writing persuasive paragraph was 67.2

D.   Findings

After the pre test and post test were conducted, than the findings could the reported as follow :

1.   The T_c value was higher than t_t in which t- test > t- table = 17.53 > 1,684

2.   The null hypothesis was rejected and the alternative hypothesis was accepted. It means that there was any significant effect of using Mind Mapping technique on the students' achievement in writing persuasive paragraph.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

Based on the data analysis, the conclusion can be drawn as the following :

1. There were any significant effect of applying mind mapping on the students' achievement in writing persuasive paragraph which was proven the result of the test. ($t_c > t_t$) from signuficant 5% (17.5 > 1.68). It means that null hypothesis is rejected and alternative hypothesis is accepted.

2. The students' achievement taught by using mind in writing persuasive paragraph got better achievement than were taught by using lecturing method and the students' got easier when they wrote persuasive writing by using concept of mind mapping.

B. Suggestions

The researcher would like to give some suggestions to people who get benefits from this research. The researcher hopes this research will be useful for anyone in teaching and learning process.

1. There were any significant effect of applying mind mapping on the students' achievement in writing persuasive paragraph which was proven the result of the test. ($t_c > t_t$) from signuficant 5% (17.5 > 1.68). It means that null hypothesis is rejected and alternative hypothesis is accepted.

2. The students' achievement taught by using mind in writing persuasive paragraph got better achievement than were taught by using lecturing method and the students' got easier when they wrote persuasive writing by using concept of mind mapping. And they could find easier to express their ideas and thoughts to write paragraph especially persuasive paragraph.

REFERENCES

Al-Jarf, R. (2009), *Enchancing Freshman students' Writing Skill with a Mind Mapping software' paper presented at the 5th International Science Conference, elearning and software for education, Bucharest, april 2009.*

Boyson, G. (2009), *The Use of Mind Mapping in Teaching and Learning. The Learning Institute, Assignment 3.*

Dr. I Wy.Dirgeyasa, M.Hum 2016.*College Academic Writing A Genre – Based Perspective. PenerbitKencana.*

Farrand, P., Hussain, F. And Hennessy E. (2002), *The efficacy of the mind map study technique. Medical Education, vol. 36 (5), pp 426-431*

Marcus Ingemann *.ebookHow   to   Use   Mind   Maps   to   Boost   Your Creativity,Achieve Faster Success, Greater Results, and Develop Winning Ideas at the Speed of Thought!".*

Pacykoc, F. Mengi B. Kamay, P.O, Onkol, P., Ozgur.(2004), *What are the Major Curriculum Issue ? The Use of Mind Mapping as a brainstorming excercise.*

Polsen, K. (2003/2004), *How do pupils and teachers view the use of mind map learning technique in chiropractice education. Journal of chiropractice education, 19:53 -4.*
SanggamSiahaandanKisnoShinoda 2013.*Generic Text Structure.GrahaIlm*

Sugiyono 2012*Metodologi Penelitian. Bandung. Penerbit ALFABETA*

Source on July 20, 2015 *by Dorothy. How to create a Mind Map.*

Suyatno.2009*MenjelajahPembelajaranInovatif .SidoarjoMasmediaBuanaPustaka.*

Wai Ling, C.(2004)*'The Effectiveness of Using Mind Mapping   skill   in Enhancing Secondary One Secondary Four Students' Writing in a CMI School.*

Wickramisinghe.A.,Widanapathirana, N., Kuruppu, O., Liyanage, I. And Karunathilake I. (2007) *Effectiveness of mind maps as learning tool for medical students'. South East Asian journal of Medical Education, vol. 1, no 1.*

Zampetakis, L.A., Tsironis, L.   And   Moustakis , V. (2007).*'Creativity Deveploment inEngineering Education : The case of Mind Mapping.*

Test Item

Name :

Class :

Please your make a paragraph persuasive with the topic about "negative effect of smartphone toward the childhood".

CURRICULUM VITAE

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