ABSTRAK


Kata Kunci: Teknik Peta Pikiran, Pemahaman Membaca, Motivasi.
USING MIND MAPPING TECHNIQUE IN IMPROVING STUDENTS’ READING COMPREHENSION

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ABSTRACT

Reading comprehension is so important in teaching-learning English. The researcher researched about how to improve the students’ reading comprehension by using the mind map technique in the process of reading teaching and learning. This research was classified into experiment research which was conducted in four meetings. Each research must have purpose and exactly it depends on the topic. The number of population is 165 students and it is divided into five classes. They were class VIII-3 and class VIII-5 and those class consisted of 64 students. Class VIII-3 would be as experimental class and the class VIII-5 as control class of this study. The main purposes of this study are: “The researcher wants to find out whether Using Mind Mapping Technique to improve student reading comprehension at the second year student of MTsN 4 Banda Aceh”. The main subjects of this research were 32 students of class VIII-3 as experimental class, and 32 students VIII-5 as control class at MTsN 4 Banda Aceh. The data obtained were qualitative and quantitative. The qualitative data were gained from the post test. Meanwhile, the quantitative data were gained from the pre test and the process of making mind maps that were conducted before the treatment and after treatment. The experiment implemented in this research were implementing the use of the mind map technique could improve the students’ reading comprehension. The students got improvements in the descriptive text, finding topic sentence, and vocabulary mastery, preparing worksheets for the students, and making use of the LCD projector optimally. The result of this study showed that the score of post-test is higher that the score of pre-test of both classes. The increasing factor in this, the first is students easily understand the main idea of the text. The second is students easily understand the structure of the text. The finally is students could deduce the purpose of the text. Based on this finding, with the mind map technique the students were motivated to be active in the classroom activities. They were actively involved in the process of teaching and learning. This condition stimulated the students to work based on their own actual capability. Thus, the students got more experiences and improved their achievement.

Key Words: Mind Map Technique; Reading Comprehension; Motivation.
INTRODUCTION

English is one of international languages which is used by most people around in the word. In a global area, people are expected to master English so that they can communicate with other people who live in other countries. As a tool of an international communication, it should be learned by people who live in a country which uses English as a foreign language, including Indonesia. To support Indonesian people in order to be able to communicate with other people around the globe, Indonesian government incorporates English into its educational curriculum as one of its compulsory subjects starting from junior high school. Hence, it is hoped that there will be a great chance for Indonesian learners to improve their English communication competence.

Learning language covers some aspects. (Steven, 2008: 54) One of the important aspects is linguistic aspect which covers grammar, vocabulary, pronunciation, structure, and so on. Beside those aspects, the learners also need to master the skills of the language such as listening, writing, reading, and speaking. However, it should be kept in mind that those skills cannot be learned discretely. Students who are learning English should master those skills integratedly.

It has been that the students tend to face written text every day. The written texts could be found in magazines, newspaper, books, articles on paper and internet, and other kinds of the written texts. Those written texts give so much information for the learners. In school setting, texts are widely presented in the learners’ textbooks.

In some school setting, the students get some English textbooks which are written in English. These textbooks contain a lot of information related to the subjects the learned. In order to access this information, therefore they need sufficient knowledge of English. Especially, they should have the skills of reading because it is written in the textbooks so that they could comprehend it well.
(Read, Jamil IM, Sinar TS, Zein TT et.al: 2018). That is why the reading comprehension is important to be mastered.

However, in the school the researcher found that there were many learners who still had low reading comprehension. It was proven when the researcher observed a learning process in MTsN4 Banda Aceh.

The difficulty students in reading comprehension is; the students did not get adequate guideline to the students how to read a text effectively. The students had low motivation to read a text. Moreover, reading was an activity that the students disliked much. Omission of, or glossing over detail. They were not able to find the topic of the text and its supporting information. The way they read text was monotonous. There was not an innovative way for the learners to read a text comprehensively. They faced some reading problems which caused the learners had difficulties in reading comprehension.

Considering the problems discussed above, the reading has an important role to help the learners to comprehend a text read. From the preliminary observation done by the researcher, it could be know that in the school, the learners had some problems in reading comprehension. Consequently, it is necessary to conduct a research on improving the students’ reading comprehension by using the mind mapping technique. (Davies, 2010: 279) It allows the students to imagine and explore associations between the concepts in a passage they read. When the students can represent or manipulate a complex set of concept of the passage in a diagram, they are more likely to understand those relationships, remember them, and be able to analyse the component parts of the text. The researcher focused on reading comprehension in class VIII of MTsN4 Banda Aceh because the students’ reading comprehension were still low.

There were a number of prominent problems related to the learners’ reading comprehension. These problems must be solved so, the student reading comprehension in class VIII of MTsN 4 Banda Aceh could be improved. The are
were some factors which caused these problems. Those factors did not come only from the students, but also from other components of the teaching learning process. All of the factors were related to each other. The researcher observed the class of VIII of MTsN4 Banda Aceh to identify the problems. This observation showed some problems which encouraged the researcher to conduct a research. The researcher did not only observe the class, but she interviewed the teacher and the students to get further information about the teaching and learning process. From the activities which were found, there were some important problems which existed in the classroom which involved the learning process, students, and teaching technique.

Firstly, the students did not get adequate guideline on how to read a text effectively. They just gave a text and asked to read. After that, they had to answer some questions about the text. It made the students feel bored and did not enjoy the lesson.

Secondly, the students had low motivation to read a text. Moreover, reading was an activity that the students disliked much. They were not interested in the reading activity, such as doing assignment and homework. The students also did not master vocabulary well.

Lastly, the way they read text was monotonous. There was not an innovative way for the learners to read a text comprehensively. The students could not learn effectively without the teacher’s guidance. Therefore, it needs a technique to solve those problems identified above.

Review of the previous study is made in order to avoid replication. This study is intended to improve the students’ reading skills by using mind mapping. Another study has been conducted to find the use of mind mapping to improve students’ reading skills. The first is a study conducted by according to Bobbi and Mike (2000: 152) Literally mind map are "mapping" thoughts. The recording technique was developed by Tony Buzan in the 1970s based on research on how the brain works. The brain often remembers information in the form of images,
symbols, sounds, forms, and feelings. Mind maps use these visual and sensory reminders in a pattern of related ideas such as a road map used for learning, organizing and planning. This map can generate original ideas and trigger easy memories. This is much easier than the traditional method of recording because it activates both sides of the brain. This method is also soothing, fun, and creative.

Next study is from Chang in Astikaningrum (2013: 20). In his study entitled “The Effect of Concept Mapping to Enhance Text Comprehension and Summarization”, he found a useful graphic strategy for improving text learning. He also states that combining a spatial learning strategy with a correction method or scaffolding instruction is a potential approach for optimizing the effects of concept mapping.

Based on explanation above, the researcher is encouraged to conduct a research entitled, “Using Mind Mapping Technique In Improving Students’ Reading Comprehension.

REVIEW OF LITERATURE

This chapter presents review of theories concerning the research topics and conceptual framework underlying the study. The details of the theoretical review and conceptual framework are presented as follows.

Reading

(Grabe, 2009: 5)Reading is a process when readers learn something from what they read and involve it in an academic context as a part of education. In the classroom, some teachers often use texts or books as media to deliver material of a subject. Furthermore, the teacher asks the students to read the texts to grab information in order that they could understand the material.

People know that reading always deals with a text which is written in books, newspapers, magazines, and websites. Furthermore, the written text has
many varieties. Brown (2001: 302) states there are two main categories of the varieties of the written texts. The first is non-fiction such as reports, editorials, letters, greeting cards, diaries, journals, memos, messages, announcements, newspaper, journalesse, academic writings, forms, applications, questionnaires, directions, labels, signs, recipes, bills, maps, manuals, menus, schedules, advertisements, invitations, directories, articles, and dictionaries. The second is fiction such as novels, short stories, and comic stripes or cartoons.

**Reading Comprehension**

Klingner, Vaughn and Broadman (2007: 8) define reading comprehension as a complex process involving interaction of many components. Those components are readers, their background knowledge, their reading strategy, the text, their interest in the topic, and their knowledge of the types. Those components interact with one another in comprehending a printed text. When interference appears in those interactions, the readers find difficulties in their reading comprehension.

In addition, Snow (2002: 11) defines reading comprehension in slightly different ways. Snow categorizes the component which is interacting and involving in reading comprehension into three components. Those components are the reader, the text and the activity. Snow includes the capacities, abilities, knowledge, and experiences of the readers as the part of the reader components. Snow explains the text as any printed and electronic text while for the activity snow includes the purpose, processes, and results of any attitude in reading.

In conclusion, reading comprehension is a brain process involving several components in which those components interact with one another to draw the meaning of the text. Those components are mainly from the reader, the text and the activity. Those aspects should interact well with each other. If there is an interference growing between them, there will be difficulties in reading.
The Mind Map Technique

The mind map which was concluded by Astuti in her thesis (2012: 24) is an important technique that improves the way we take notes, and supports and enhances our creative problem solving. The reader can simplify what they have read so that they can understand what is explained by the writer in the text. The diagram from a text shows detail information, main and minor information. Making the diagram or map makes reader can remember and learn clearly and easily.

(Potter and Hernacki: 2004) The mind mapping is a technique to use the whole brain by using visual and other graphic to create a meaningful impression. Using the whole brain can balance two sides of human brain: left and right brain. It means that human can maximize their brains to create meaningful things because of their brains power.

The concept map method or also called mind mapping or concept mapping. This method was popularized by Buzan (2010: 4), a prolific expert and writer in the fields of psychology, creativity and self-development in the 1970s, but originally this method was created by Gelb. Buzan explained that concept maps or mind mapping are creative, effective, and literally literate ways that will "map" the mind.

It is also quoted by Sugiarto (2004: 34) that it is a technique to summarize reading resources and then visualize the problems in the form of map to make it easier to comprehend. By using this technique, the readers can quickly identify the information from the text they read and also grab the structure of a subject and the way that pieces of information fit together. It can help the readers to make a note from the text clearly. Every piece of the text can be noted and described in a map which consist of any symbols or pictures that connected each other to be complete information.

While Brown (2001:14) defines a technique as a specific activity implemented in the classroom that were consistent with a method and therefore
were in harmony with an approach as well. When the researcher decided this mind map as a technique, she tried to implement the mind map to reach some purposes in the teaching and learning in order to improve the students’ reading skills.

Hence, the researcher agreed with Panatda’s definition of mind mapping technique in Siripanich, Panatda & Laohawiriyano (2010: 4). It is teaching technique using mind mapping as a tool to represent students’ understanding by using words, picture with colour and symbols in a hierarchical or tree branch format.

Benefits of Using The Mind Map

Hudoyo (2002: 4) First with the concept network depicted on the concept map, learning becomes meaningful because the knowledge or information "new" with structured knowledge that students have had is connected so that it becomes more easily absorbed. Second interrelationships between concepts can be well known by students and teachers. This means that the concepts become mutually isolated which at the same time provides a good picture of the depth and breadth of the concepts to be learned. Third, with the concept map the teacher can provide a remedial understanding of a concept that is difficult for students to understand because the teacher can explore concepts that are not yet understood. Fourth, it is easier to prepare learning sequences by referring to concept maps that are adapted to their experiences. Fifth, students understand the relationship between the concepts to be learned and will be easier to summarize after completion of learning. The six students will be stronger in their memory and will be easier to apply the concepts they have learned, so "problem solving" is no longer a difficult thing.

Potter and Hernacki (2004: 110) categorize way of learning into two. The first is how to grasp information called modality. The second is how to manage and process the information grasped called brain domination. Every learner has
their own modality to learn something. The modality is classified into three types, according to Potter and Hernacki (2004: 112). They are visual, audio, and kinestetik. For learner who belongs to visual type, they prefer to read and pay attention to illustration on the board. They also take notes well. So, the use of the mind map is appropriate for them. This technique is also appropriate for the adolescent learners because they will not be bored when they are reading a passage.

Using the mind map technique, the students are able to join the teaching and learning process in a simple way which guide the students learning reading skills easily so that they can comprehend any text well. The readers can improve their memory too because this technique links some things in the text the readers read to be remembered to some other idea. It also directs the students to think detail information within the text.

**How to Make Mind Map**

There are several ways to make mind map proposed by some experts. The ways will lead someone to make the mind map. The experts who propose the ways are Rose and Nicholl (2002 :76). They explain the ways to make mind map. There are eight steps as follow.

1. Start with the topic in the middle of paper.
2. Use keywords.
3. Make the branch from the main topic.
4. Use symbols, colours, words, or pictures mainly in the mind mapping.
5. Make it as interesting as possible.
6. Make it full of colours.
7. Repeat again two or three times to make it perfect.
8. Do it by yourself.

Other procedures of making mind map are quoted by Sugiarto (2004: 98). He points out some steps to create a mind map. There are five steps. Here are those steps.

1. Prepare the equipment to make mind map such as paper (A4/Folio/A3), pencil or pen, stabile, marker or colour pen.
2. Determine the topic, make a central image in the centre of the paper, the position of the paper is landscape, draw the topic and give colour to it. It can be the combination of three or four colours.

3. Make a main branch which is the idea of the topic, make the word in the same length with the main branch, make a word per branch, write down the word with capital letters, and then give them some colours.

4. Make a thin branch which is a sub-topic, add the words or pictures, add the main idea and develop it with the sub-topics. All the sub-topics are placed in every branch separately.

5. Continue it with other ideas by making a new branch.

Furthermore, there are Potter and Hernacki (2004: 125). They also itemize some steps of making a mind map. These steps consist of nine points.

1. Make a circle of main idea in the middle of paper.
2. Make branch from the main idea to make key points. Do not forget to use a colour pen to make it.
3. Write the keywords or phrases in every branch and then develop them with details.
4. Give additional symbols and illustrations.
5. Do not forget to use capital letters.
6. Write down the main ideas with the bigger letter.
7. Be creative and express it freely.
8. Use the unique form to show the points or ideas.
9. Do not forget to make it horizontally to make a wider space.

A famous expert of mind map is Buzan in Davies (2010: 79). He makes several recommendations when making mind map. These are the recommendations.

1. Place an image or topic in the centre using at least 3 colours
2. Use images, symbols, codes, and dimensions throughout your Mind Map.
3. Select key words and print using upper or lower case letters.
4. Each word/image is alone and sitting on its own line.
5. Connect the lines starting from the central image. The central lines are thicker, organic and flowing, becoming thinner as they radiate out from the centre.
6. Make the lines the same length as the word/image.
7. Use colours—your own code—throughout the Mind Map.
8. Develop your own personal style of Mind Mapping.
9. Use emphasis and show associations in your Mind Map.
10. Keep the Mind Map clear by using radial hierarchy, numerical order or outlines to embrace your branches.
Among the experts’ types of making mind map, there is a same focus. They emphasize the sequences in creating a graphic. It means that making a mind map is formulating information of a written text into a picture which is more interesting way to be understood by a reader. In a journal, Ellozy and Mustafa (2010: 68) stated that “...the mind maps are usually highly visual including pictures and colours as well as other visual prompts...”.

Figure 1: How to Make Mind Mapping

RESEARCH METHODOLOGY

Teachers are most important factor in teaching and learning process. They guide the students to get the goal of education. Teacher is demanded not only assist the students with a number of teaching materials but also ought to be able to motivate and create the students’ interest to learn as well. The teachers of the school play an important role in teaching the goal of the curriculum determined by department of educational and culture. Therefore, the existence of them is very important both in quality of the teacher themselves. In the teaching learning process, the quality of teaching staff very important. In addition, at MTsN 4 Banda Aceh, there are four English teachers, all females. In addition, all of them graduated from English Department (S1) Faculty of Teacher Training and Education, UIN Ar-Raniry.
MTsN 4 Banda Aceh has 554 students. The average number of the students for each classes between 34 students. The object of this study is the second year students that consisted of five classes. Each classes has 32 students. In addition, the researcher only took two classes of the second year students; class VIII-1 and class VIII-4 as the subject of the research. However, both of those classes have the same average ability that’s why the researcher chose those classes. The population of this study is the second year students at MTsN 4 Banda Aceh. The number of population is 165 students and it is divided into five classes.

Pre-Test

Before giving the material, the researcher conducted the pre-test to the students in order to know the students’ ability in reading. The researcher holds the research about for 4 meetings. Pre-test will be given by researcher in the first meeting before she conducts the teaching-learning process. However, the pre-test will be given to experimental class and to control class to find out the data before giving the mind mapping in teaching reading.

Treatment

First Meeting

The teacher prepare students psychologically and physically to follow the learning process by greeting, inviting students to tidy up their class and appearance, inviting students to initiate activities by praying, and checking the attendance of students. The teacher gives brainstorming to students related to descriptive text material the title is "Peter", Students listen to the explanation given by the teacher about the definition, structure, linguistic elements, descriptive text function, and the teacher gives descriptive text to students to read. The teacher randomly selects a number of students to explain what the text means. The teacher and students together make a summary of the material that has been learned at this meeting. The teacher explains the plan for future learning activities.
Second Meeting

Students read descriptive text title is “Muady Ayunda” related to the activities being carried out. Individual students make questions to ask the activities that their friends are doing. Randomly the teacher chooses several students to explain what the text means. Teachers give assignments to students to explain or say the activities that are being carried out and to record whenever any participant utters an expression the.

Third Meeting

Students read descriptive text title is “My Teddy Bear” related to the activities being carried out. Students observe the sentence patterns and sentence structure used in the text. Participants make a series of mind mapping with individual understanding. Individual learners look for any points in the text. With the guidance of the teacher, the teacher formulates questions about how to arrange sentences that state that she is carrying out an activity. Teachers and students together make a summary of the material learned at that meeting.

Fourth Meeting

Participants read the descriptive text title is “Beautiful Bag” related to the activities being carried out, which used descriptive text and asked the reason for the activities carried out. Students observe the sentence patterns and sentence structure used in the text. Participants make a series of mind mapping with individual understanding. The teacher observes and helps students who have difficulty in doing their work. Teachers and students together make a summary of the material learned at this meeting. Teachers ask questions to students to help them reflect on the learning activities they have done.

Post-Test

To know the result of the students, the researcher gave the post-test to the students. The result of post-test will show the students’ progress in
mastering reading. The post-test was given at the end of the teaching-learning process. Post-test was given after teaching learning process to find out the students improvement after implementing the Mind Mapping.

The scoring Rubric By Syarifah (2008 : 13)

Table 1: Assessment Rubric

<table>
<thead>
<tr>
<th>SCORE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-1</td>
<td>• Main Idea : Identifying the main ideas, very consistent with descriptive text forms, grammar are well ordered and orderly, the relationship between parts of the text is clear</td>
</tr>
<tr>
<td>20-1</td>
<td>• Spesifik Informasion : Specific information or supporting idea is developed from the main idea by giving the specific definitions, examples, facts, comparison, cause and effect that is related to the topic sentence.</td>
</tr>
<tr>
<td>20-1</td>
<td>• Reference : consistent forms of descriptive text, no repetition of words or phrases, the relationship between parts of the text is clear</td>
</tr>
<tr>
<td>20-1</td>
<td>• Inference : understanding is quite effective, the relationship between parts of the text is clear, the reader can make conclusions after reading the text.</td>
</tr>
<tr>
<td>20-1</td>
<td>• Vocabulary : the vocabulary corresponds to the descriptive text and the relationship between parts of the text is clear.</td>
</tr>
</tbody>
</table>

The Technique of Data Collection

The technique of data collection used is test. Test is one of techniques used to identify the students’ ability in mastering reading. Test will be given twice; pre-test and post-test. The purpose of giving test to students is to know their ability in reading before using the treatment and after applying the Mind Mapping.

The Technique of Data Analysis

In analyzing the data, the researcher used the quantitative analysis method. The data analysis will be obtained from the result of test (pre-test and
post-test). This test is in order to see the students’ improvement in learning reading after implementing Mind Mapping. The data from test will be analyzed by using interval data, which is presented by score.

The following formula will be used in analyzing the data from test:

1. **Range**
   
   Range is the difference between the highest score and the lowest score.
   
   The formula is:
   
   $$R = Hs - Ls$$
   
   In which:
   
   - $R$ = the range of the score
   - $Hs$ = the highest score
   - $Ls$ = the lowest score

2. **Mean**
   
   Mean is the average result that received from the students. The formula is:
   
   $$\bar{x} = \sum \frac{fx}{n}$$
   
   In which:
   
   - $\bar{x}$ = Mean
   - $fx$ = Total of the students
   - $n$ = Number of the students

3. **Standard Deviation**
   
   Standard deviation is the general rendition of deviation of one group the mean score of the groups.
   
   $$SD = \sqrt{\frac{\sum fx^2}{n} - \left(\frac{\sum fx}{n}\right)^2}$$
   
   In which:
   
   - $SD$ = standard deviation
   - $\sum fx^2$ = The total of midpoint that is quadrate and multiplied by each frequency
\[ \sum f_x = \text{the total of multiplication result between midpoint and frequency} \]

\[ n = \text{Number of Students}. \]

4. \( T \) -- score

\( T \)-Score to indicate significant or the difference the score of two groups.
(Experimental and control group)

\[ T \text{- Score} = \frac{X_e - X_c}{\sqrt{\frac{SD_e^2}{n} + \frac{SD_c^2}{n}}} \]

In which:

\( X_e \) = Mean score of experimental group

\( X_c \) = Mean score of control group

\( SD_e \) = Standard deviation of Experimental group

\( N \) = Number of students.

THE FINDING AND DISCUSSION

Finding

The study was conducted at MTsN 4 Banda Aceh, started from November 04\(^{th}\), 2019 and finished on November 14\(^{th}\), 2019. There were four meetings which related to class of VIII-3 as the experimental class and VIII-5 as the control class. There are 64 students in both of experimental and control class.

Teaching Process by Using Mind Mapping Technique

First Meeting

In the first meeting, the study was conducted on November 04\(^{th}\), 2019. The time allocation was 60 minutes. The researcher entered to class VIII-3 as an experimental class and introduced herself and greeted them. She said “Assalamualaikum warahmatullahi wabarakatuh, Hello, good evening students, how are you today?”, and then the students answered, “Good evening too Miss, we are fine, thank you and how are you Miss?”, “I am also fine, thank you.” Then she said “I am Putri Wulandari. I am student of STKIP An-Nur. I am
coming here to do my research and I hope you will help me to answer this test to complete my script.”

After introduced herself, the researcher called the students’ name based on attendance list. She wanted to know them. The researcher invited the students to recall their memory about descriptive text. The students seemed enthusiastic answering some questions from the teacher. After that she said “Now, I want to give you the pre-test”, the topic of the text is “Peter.” After she distributed the pre-test to all students and then she said again “Read the text below correctly.” Then she said to them “Do you understand?” and then the students answered “Yes, Miss”.

Figure 4.1 : Descriptive Text About the Artist

After students read the text, they answered the questions that have been given by the researchers. The students looked enthusiastic in doing this activity. They tried to find the answers. They discussed with their friends and sometimes asked the researcher. Furthermore, the researcher found that the student had some problems during the pre-test.

The researcher asked to Nabila “What do you think about the lesson today, Nabila? Do you like it?” She answered, “Yes, I like it.” Then the researcher asked again, “Are there any difficulties?” She answered, “Yes.” The researcher said, “Why?” “I am still confused, Miss”
After all students finished the pre-test, the researcher informs students about the next meeting activity. Then, she summarize the lesson and end the class.

Meanwhile in the control class, the lesson was not taught by their own English teacher, but it was taught by the researcher. The researcher asked their help in the conducting the study in that class.

At the first meeting, the researcher came to the class and greeted all the students by saying “Assalamualaikum Warahmatullahi Wabarakatuh.” Then, the researcher directed the students in English by saying, “Good Evening!” Then the researcher asked about the condition or feeling by asking the students “How are you today?” And the students replied “I am fine miss.” One student asked to the researcher “How about you Miss?” And then, the researcher said, “I am very well, thank you.”

After that, the researcher called the students’ attendance list one by one. The researcher wanted to check which one of the students did not attend to the class at that day. Then she informed to the class that they had to do a test or it was called pre-test. One of the student asked to the researcher “What for the test miss Wulan?” and she answered “It is to complete my script, so you just help me as good as you can, ok!” “Yes Miss Wulan.” The students replied. The researcher give a text descriptive about “Peter”.

Then she asked the student to read the text, they must answer the questions that have been given by the researcher. The students did what the researcher asked. The researcher took this performance as the pre-test. After the students finish, the researcher ended the class by saying goodbye.

Second Meeting

The research was conducted on November 07th, 2019. The time allocation was 60 minutes. The researcher entered the class and greeted the students, called the attendance list’ name. In this meeting, the researcher focused on
involving the students to the process of teaching and learning and building interaction with the students.

The researcher explained the definition, function, structure, and linguistic elements of descriptive text in detail. Students listen to the explanation explained by the teacher about descriptive text. The researcher asks students "there are questions or explanations that are not understood". Students answer "already understand".

The next activity is reading descriptive text. The topic of the text is "Maudy Ayunda". Researcher use power point media, students observe and read the displayed text. The researcher read the story, and told students to interpret. The researcher made the classroom situation active in question and answered activities. This activity is supported by the descriptive text below.

![Maudy Ayunda]

Maudy Ayunda is my favorite artist. She very beautiful and smart. She make me fall in love with her since first I saw her at TV. My first time see her is when she promote a beauty product on a TV’s advertisement. Since then, she play movies and also become a singer. Her voice is also wonderful. I like the song since the first time I heard it. Maudy is also an artist that care about her education. I hear now she is studying somewhere at foreign university. I hope she will make new movies and songs.

The researcher showed the way it worked in front of the class. She drew the map on the board to make the students understand. Firstly, the teacher distributed blank papers and asked the students to copy the map into the paper so they could know the way to make the map. They could express their feelings by making the map. Then, they had to make a mind map based on the passage they read before. The mind map made comprised information about generic structure of the passage. There were orientation as a main branch which had sub-branches of more detail information, complication or problem which might be more than one problem and then could be made sub-branches for those
problems. This map helped the students to understand the content of the passage easily.

After all students are ready to write their notes, the researcher told the students about the next meeting activities. Then, the researcher summarized the lesson and ended the class. The effect of using the mind map in the second meeting was supported by the mind map below.

Meanwhile in control class, the research was conducted on November 08th, 2019. The time allocation was 60 minutes. The researcher entered the class and greeted the students, called the attendance list’s name the researcher came to the class and greeted them as usual, asked about their condition and checked their attendance list. After that she explains the definition, function, structure, and linguistic elements of descriptive text in detail. Students listen to the explanation explained by the teacher about descriptive text.

The next activity is reading descriptive text. The topic of the text is, “Maudy Ayunda”. Researchers use power point media, students observe and read the displayed text. The researcher explains the text according to the structure of the descriptive text. and students observe with focus and ease. To facilitate the students in doing the activity, the researcher introduced the technique mind map. researchers explain the advantages and how to make it.

The researcher showed the way it worked in front of the class. She drew the map on the board to make the students understand. The mind map made comprised information about generic structure of the passage. There were orientation as a main branch which had sub-branches of more detail information, complication or problem which might be more than one problem and then could be made sub-branches for those problems, and resolution. This map helped the students to understand the content of the passage easily.

After the researcher explained about the material, she asks students to record all the explanations. Then she asks students the difficulty in understanding the explanation. They admitted that they still had low vocabulary
mastery and low understanding of grammar. Then, the researcher gave an explanation to them to read often and find out vocabulary that was not understood. The researcher decided to give more explanation, and all students have finished writing their notes. then she ended the class by saying a prayer together.

Third Meeting

The research was conducted on November 11th, 2019. The time allocation was 60 minutes. The topics were “My Teddy Bear”. After greeted and called the attendance list’s name, the researcher showed the text descriptive and still let the students to identify the text. She gave a short explanation about the topic such as the use of those structure, linguistic elements, and told them about the vocabulary that usually used in those text.

Then, the researcher also asked them to find more detail information of the passage. The students looked enthusiastic in doing this activity. They tried to find the information. They discussed with their friends and sometimes asked the researcher.

**MY TEDDY BEAR**

I have a favorite doll. It is an original Teddy Bear from America. Aunt Lily gave it to me last year when she returned from her business trip in New York. I was very happy. I put it on a cabinet next to my bed. Sometimes I use it as a pillow.

My Teddy Bear is very big, and the colour is brown. It is about 150 centimeters tall and the width is about 50 centimeters. When I put it on my bed it will occupy half of it. It is almost as big as my body. It is made of typical kind of fabric called rasfur. The head is round with the size of 25 centimeters. It has two ears which located on top of its head. The shape of the ear is half circle and the size is half of my palm. The colour of its eye is dark brown. I think it is made of glass since I can see through it. It has a light brown ribbon encircling its neck. On the sole of each foot, there is a paw pattern made of smooth fabric.

Same with the second meeting, the students must make a mind map from the text given. After all students have been performing their work, the researcher gave the feedback directly. Some students had understood well and had good vocabulary also the grammar. The last, to end the class, the researcher...
summarized what they learned together. After that, she said a prayer together with the students and said goodbye.

Meanwhile, in control class, the research was conducted on November 12th, 2019. The time allocation was 60 minutes. The researcher came to the class and greeted them as usual, asked about their condition and checked their attendance list. After that, she gave the text descriptive, the topic is “My Teddy Bear”. The researcher also asked them to find more detail information of the passage. In finding that information in the generic structure, they should read the passage well. Before that, the researcher gave them some unknown words which were taken from the passage to help them to recognize the meanings and asked them to consult the other difficult words with their dictionary.

Then, the researcher asked them to make a mind map based on the text they read. The mind map made comprised information about generic structure of the passage. There were orientation as a main branch which had sub-branches of more detail information, complication or problem which might be more than one problem and then could be made sub-branches for those problems. They identify the mind map until the time is up. Then, the researcher ended the class by saying “Assalamualaikum Warahmatullahi Wabarakatuh”.

Fourth Meeting

In the last meeting, the researcher entered to the classroom and greeted the student. Before she gave the post-test to the students, she gave a new material about “Beautiful Bag”. The researcher asks the students to read the text carefully. Then, she requested to make a mind map based on the passage they had read. When they found difficult words in the text, they had to check these words in their dictionary. They also had chances to ask the researcher. In this meeting, she made this as post test.

There were some questions related to the text which should be answered by the students. They were able to finish the task faster because they shared
their problems with their friends. When they finished the task, the researcher asks one student to read one question and its answer. The researcher guided the student when they did some mistakes. Then, she ended the class by saying goodbye. “Thanks for your attention, good luck to you and don’t forget to study hard at your home, may Allah also always bless you. Assalamualaikum Warahmatullahi Wabarakatuh. See you next time.”

From this meeting, the researcher found that the students’ reading skills and understanding in making students’ mind map improved. This was the mind map from the one of the students.

At the last meeting in control class, the researcher thought that students understood about the explanation given. So, the researcher gave post-test. The students re-act based on the text, the topic is "Beautiful Bag". The researcher said “Ok, because you have dine the test, thank you for your participation.” In the end of the meeting, the researcher saying goodbye to the students before she left the class, “See you next time, thank you very much. “Assalamualaikum Warahmatullahi Wabarakatuh”.

The Result of Research

Pre-test was given in the first meeting to the experimental class and control class. The collected data of pre-test is presented in the following table:

The Analysis Result of Post-Test Score of Experiment and Control Class

<table>
<thead>
<tr>
<th>Students’ Number</th>
<th>Experiment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>X²</td>
</tr>
<tr>
<td>01</td>
<td>100</td>
<td>10000</td>
</tr>
<tr>
<td>02</td>
<td>100</td>
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<tr>
<td>06</td>
<td>100</td>
<td>10000</td>
</tr>
<tr>
<td>07</td>
<td>100</td>
<td>10000</td>
</tr>
</tbody>
</table>
After knowing the result of mean score of Experiment and Control Class, the writer can calculate Standard Deviation each classes.

- **Mean:**
  
  EC Post-test
  
  $\bar{X}_e = \frac{\sum X}{n} = \frac{2830}{32} = 88.43$
  
  CC Post-test
  
  $\bar{X}_c = \frac{\sum X}{n} = \frac{2100}{32} = 65$
  
- **Standard Deviation:**
  
  $SD_e = \sqrt{\frac{\sum x^2}{n} - \left(\frac{\sum x}{n}\right)^2} = \sqrt{\frac{2837.00}{32} - \left(\frac{2830}{32}\right)^2} = 78.19$
  
  $SD_c = \sqrt{\frac{\sum x^2}{n} - \left(\frac{\sum x}{n}\right)^2} = \sqrt{\frac{1452.50}{32} - \left(\frac{12100}{32}\right)^2} = 62.25$
The score of SD_0 and SD_1 show the result of Experiment and Control Class pre-test, so the researcher can count the t-score.

### T-score

\[
t = \frac{X_0 - X_1}{\sqrt{\frac{SD_0^2}{n} + \frac{SD_1^2}{n}}}
\]

\[
t = \frac{89.29^2 - 67.05^2}{\sqrt{\frac{32}{87.78} + \frac{32}{87.78}}}
\]

\[
t = \frac{7972.7 - 4495.7}{87.78}
\]

\[
t = \frac{24.91 + 14.04}{87.78}
\]

\[
t = \frac{38.95}{87.78}
\]

\[
t = \frac{62.40}{87.78}
\]

\[
t = 1.46
\]

From the calculation data by using t-score formula, it found that t-score of pre test is 0.12 and after giving treatment, the t-score is 1.46. Sudijono (2005:316) the testing criterion used for hypothesis result is: if t<t_t, that means the alternative hypothesis (H_1) is accepted, but if t>t_t this means the null hypothesis (H_0) is rejected.

### Discussion

The research was focused on improving students’ reading comprehension using the mind map technique. This technique was implemented in descriptive text. The findings of the research showed that the mind map technique was successful in improving the students’ reading comprehension.
From the observation and interview in the preliminary step in this research, that was reconnaissance, it can be implied that English was one of the difficult subjects according to the students, especially reading. Based on this main problem, the researcher and the English teacher agreed to solve this problem by implementing the mind map technique in combination with some strategies and adaptations considering the students’ condition. Those strategies were questioning and answering activity, using map/chart of words, and using interesting pictures and topics. The adaptations were done to simplify the strategies and facilitate the students so that they could understand easily. Those actions taken in the classroom aimed at improving the students’ reading comprehension. It was expected to be able to help the students to comprehend a text easier and better than before.

The researcher implemented the mind map by asking the students to draw or design a mind map which comprised of information of a text, pictures and symbols. It helped them understand the information of text that they read. As Sugiarto (2004) stated that it is the technique to summarize reading resources and then visualize the problems in the form of map to make it easier to comprehend information contained. Generally, it will be easier to remember a diagram than a description because the diagram represents the highlight or summary of texts. Furthermore, making mind map also could make the students creative and motivated in the reading teaching learning process.

Implementing mind map in the reading teaching and learning process could train the students to improve their vocabulary mastery. Since the key words were important in making a mind map, the students were trained to find some words which represented an idea and then put in each branch of the mind map. It was stated in one of the steps in making a mind map proposed by Potter and Hernacki (2004). They stated “write the keywords or phrases in every branch and then develop them with details”. It is also supported in one of Buzan’s steps in Davies (2010) which said “select key words and print using upper or lower case
letters”. The researcher also invited the students to understand how to understand the meaning in a word by teaching the morphological form of the word in a chart/map.

Next, in the making a mind map, the students were asked to elaborate a topic which was represented by a key word on a branch. They were asked to elaborate the topic using their own words. They could do it by following the teacher guidance.

Moreover, the mind map also gave the chance to the students to be active. They could share their ideas to their friends or their teacher. When they found difficult words in the text they read, they would consult their dictionary, their teacher or would guess the meaning on their own. Initially, they were passive in some discussions because they were not accustomed to speaking freely. Therefore, the researcher tried to solve those problems by giving them some intermezzos, asking them to read a question, and inviting them to interact in the class discussion or to give responses.

However, the students’ response toward the implementation of Mind Map Technique is also important in order to obtain the students’ feedback after applying the technique.

Statistically, experimental class is better than the control class. Thus, it could be conclude that, Mind Map Technique is the appropriate technique that can be used in learning reading comprehension.

CONCLUSION

Based on the discussion in the previous chapter, it can be concluded as presented below;

The first conclusion was that the mind map can be used to improve the students’ Reading skills. In general, by applying mind map, it will help them avoided the same mistakes in the future because they could read and comprehend the texts easily. The teacher also should give the directly feedback if
there were any students who have made the mistakes. By giving the feedback, the students would feel that the teacher paid attention to their work and it would encourage them in practice mind map. The researcher gave them ways of reading. The researcher invited the students to get involved in the reading activities so that they understand more how to solve their reading problems.

The second conclusion the researcher found that the mind map could improve the students’ reading comprehension. They could grasped information from a text they read and understood it. They could identify the main and detail ideas of the text. The technique also improved the students’ creativity and vocabulary mastery. The interesting ways of making mind map could make the students read texts effectively and efficiently. They also became good in paraphrasing a sentence which represented their understanding of information with in the sentence.

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