

**IMPROVING THE STUDENTS' ACHIEVEMENT IN WRITING PROCEDURE
TEXT BY APPLYING
MIND MAPPING TECHNIQUE**

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Abstract

This study was aimed at improving the students' achievement in writing procedure text by applying mind mapping technique by conducting classroom action research. The subjects of this research were the students of grade X SMA Kebangsaan Medan. The number of the students was 15 students. The data were analyzed by using quantitative and qualitative procedures. The quantitative data were taken from students' scores in writing procedure text. Then the qualitative data were taken from the questionnaire and observation sheets. There were two cycles in this research. The tests were done in three times. Before run the first cycle, the preliminary test was done. Based on the data analysis, the mean of the students score in preliminary test was 47.8, in cycle I was 64.6, and in cycle II was 72.8. The conclusion is not only mind mapping technique significantly improves the students' achievement in writing procedure text, but also the students understanding about procedure text.

Keywords: Writing, procedure text, mind mapping, classroom action research

INTRODUCTION

Writing is one of the most important way of communication in our life. Every day, we use writing skills in our life. We use writing from the simple to complex writing, such as in a note, letter, journal, assignment, etc. Based on its functions, writing is one of the most important skill that we have to comprehend. Knapp and Watkins (2005) stated that many students who do not know how to start a writing task, they spend many times staring at the blank of paper when they're asked to write. A primary aim of teaching writing is to provide students with the knowledge to become effective users of written English. The aim is not to provide students with simplistic formulas or rules and regulations for 'correct' English. While rules and formulas have their uses on their own, they do not produce powerful writers, writers who will become competent, confident and articulate users of the English language. Based on the writer's Field Study Experience (Praktek Pengalaman Lapangan/PPL), many students cannot write well. Students were not interested in writing and got bored when they were asked to

write. This situation also happened in SMA Kebangsaan Medan. When writer made such an interview with the teacher and the student, they told the same problem with students in SMA N 2 Perbaungan. Zulham, the English teacher said, "Students felt confuse when they're asked to write because many of them don't understand about tenses, lack of vocabularies, and cannot arrange the sentence. The students felt confuse when they are asked to write because they have to think of what they are saying and they also have to look at their use of grammatical structure. It can be seen in their assignments in writing skill. The standard score (Kriteria Ketuntasan Minimal/KKM) in that school is 70.

Students who obtained the scores of ≥ 70 are termed as competent. It means that students fail when they get score below 70. It was found that many students who got score below 70 in writing task. The low score can be caused of many factors. Rahmatul Husna, one of the student in SMA Kebangsaan Medan said that writing is difficult, because I have to look at the sentence and cannot translate it. Winda also said that she does not know how to write and lack of vocabularies. Many students think that writing is complicated to study. Based on that fact, writer can say that students don't understand how to make a simple text and they don't have enough motivation to write.

Procedure text is one of the genre in writing skill. Pravita (2009) also said there are some students' weaknesses in writing procedural text. the weaknesses are in the form of grammar, vocabularies, and sequences. They have difficulties to use grammar and to choose the dictions in making right sentences of procedural text. Paragraph is one of element in writing that has function to make an interesting text. The text should be arranged well then the idea can be connected and organized. The most important problem in writing is the student has many ideas in their mind but they cannot express it in writing. On the other hand, organizing ideas or information is not easy. This situation happened because teacher cannot find the interesting method in teaching writing skill to students. Teacher cannot teach the students in the simple way.

In this case, the teacher should find the interesting method in teaching writing skill to increase student's motivation and ability in writing skill. For this purpose, to improve students' ability in writing, the writer introduces mind mapping technique as one of the alternative way to make writing as an interesting lesson in the learning process. This technique helps the students to connect their ideas one by one so they can

arrange they way of their story well. Mind-mapping technique is one of interesting technique in writing because mind-mapping shows students' thinking process while they are writing. It helps teacher to teach and also helps students to write easily.

The problem of study is formulated in the following question, "Is the students' achievement in writing procedure text significantly improved if they are taught the material by applying the mind mapping technique ?"

CONCEPTUAL FRAMEWORK

Knapp and Watkins (2005) stated that writing is far more than speech transcribed. On the other hand, writing is an inscription. In writing we arrange clauses into a sentence: the main idea becomes the main clause; subsidiary ideas become subordinate clauses and so on. Moreover, writing is one of the way of communication to express the ideas, feeling, or opinion in written text to have a good interaction in the society.

As Langan (2001) explains that writing process occurs in several stages :

1) Prewriting; 2) Writing the first draft; 3) Revision; 4) Editing; 5) Review activities.

The kinds of genre in writing are procedure, descriptive, report, news item, recount, hortatory exposition, analytical exposition, spoof, explanation, discussion, review, and narrative text. A procedure text is a text that is designed to tell how something is done. It explains how people perform different processes in a sequence of steps. Procedure text uses in many writing text, such as recipe of kind of food, how to turn on phone, or how to operate the computer. This text uses present tense because of when you tell how to operate or how to cook something, the tense must be now.

Mind mapping technique is considered as an appropriate technique in teaching procedure writing. Windura (2008:17) states that mind map is an effective technique of note-taking and useful for solving the problem of students' in writing. Mind map help students easier to remember a lot of information by using symbols, pictures, or colors. To make a mind map, one starts in the center of page with the main idea, and works outward in all directions, produce a growing and organize structure composed of key words.

Mind map is easy and natural (Buzan, 2005:14). He describes that mind map consists of a central word or concept, around the central word you draw the 5 to 10 main ideas that relate to that word. You then take each of those child words and again draw the 5 to 10 main ideas that relate to each of those words. In the other side, Buzan states mind map is graphical technique for visualizing connections between several ideas or pieces of information. There are four recipes of mind map : blank paper, pen or color pencil, brain, and imagination. Mind mapping is used in note taking, brainstorming, problem solving, and project planning.

METHOD

This research was conducted by applying the Classroom Action Research (CAR) or Action Research (AR). Mills (2000) identifies action research (AR) as any systematic inquiry conducted by teacher researchers, principals, school counselors, or other stakeholders in the teaching/learning environment to gather information about how their particular schools operate, how they teach, and how well their students learn.

The subject of this research was the student of Grade X in SMA Kebangsaan Medan. There consisted of male and female. The students were 15-16 years old. The initial name of students can be seen in table 3.1.

Table 3.1 Students' Initial Name in Grade X of SMA Kebangsaan

NO.	STUDENTS' INITIAL	SEX
1.	AS	M
2.	A	M
3.	AMN	M
4.	AIH	F
5.	EA	M
6.	FNS	F
7.	JS	F
8.	LET	F
9.	MA	F
10.	MAP	M
11.	NS	F
12.	RHH	F

13.	TA	M
14.	UIS	F
15.	WF	F

The data were collected from interviews with students, observations, questionnaire, and collection of student works. The result of the interview showed that students have problems in writing procedure text. Arief, the student of grade X SMA Kebangsaan Medan said that he did not understand how to write well, he often got the low score in his writing task. Besides, Uci, the other student also said that she also did not understand how to make a good paragraph, for example, she felt difficult gathering ideas and lack of vocabularies. Many students' who got score very low in writing task, many of them got score below the standard score, which is 70.

Before doing the research, the researcher conducted the preliminary test. The result of preliminary test showed the students' ability in writing procedure text. Beside it, the result of observation sheets and questionnaire sheets also showed the students' problem in teaching and learning writing procedure text.

The data were collected by using quantitative and qualitative data. The students' questionnaire sheet can be seen in table 3.2.

Table 3.2 Students' Questionnaire Sheet

<p><i>Students' interest to English Subject</i></p> <ol style="list-style-type: none"> 1. What subject do you like ? <ol style="list-style-type: none"> a. Bahasa b. English Language c. Physics d. Others (.....) 2. What subject do you dislike ? <ol style="list-style-type: none"> a. Mathematics b. Sport c. English Language d. Others (.....) 3. What do you think about English ?
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- a. Easy and nice
 - b. Difficult and uninterest
 - c. No comment
 - d. Others (.....)
4. How many text books do you have ?
- a. One book
 - b. Two books
 - c. Three books
 - d. Others (.....)
5. Do you read your book before entering the class ?
- a. Yes
 - b. Often
 - c. Seldom
 - d. Others (.....)
6. Do you review the subject that you have learned ?
- a. Yes
 - b. Often
 - c. Seldom
 - d. Others (.....)

Teaching Learning Activity

7. Do you write the materials that have been explained ?
- a. Yes
 - b. Often
 - c. Seldom
 - d. Others (.....)
8. How does your teacher open the class?
- a. Give a pre-test
 - b. Give the motivation
 - c. Ask the assignment
 - d. Others (.....)
8. How does your teacher teach ?
- a. Make a note and do the task

- b. Discuss, ask, and answer the questions
 - c. Lecturing
 - d. Others (.....)
10. How does your teacher's attention to the students' question and suggestions ?
- a. Interest
 - b. Nor really interest
 - c. Uninterest
 - d. Others (.....)
11. Does your teacher always connect the material with daily life ?
- a. Yes
 - b. Seldom
 - c. No
 - d. Others (.....)
12. How does your teacher close the class ?
- a. Sum up the materials
 - b. Give an assignment
 - c. Give a post-test
 - d. Others (.....)
13. What technique do you like learning English ?
- a. Do many tasks
 - b. Lecturing and discussion
 - c. Play while learning
 - d. Others (.....)

Students' Ability

14. What is your problem learning English ?
- a. Lack of vocabularies
 - b. Uninterest
 - c. I don't understand English
 - d. Others (.....)
15. How is your ability in writing English text ?
- a. Good

b. Not really good

c. Bad

d. Others (.....)

16. What is your problem learning English?

a. Lack of vocabularies

b. Writing is bored

c. I cannot gather the ideas

d. Others (.....)

17. What do you think about writing an English article ?

a. Difficult

b. Easy

c. No comment

d. Others (.....)

18. What is your problem in writing ?

a. Lack of vocabularies

b. I cannot gather the ideas

c. Tenses

d. Others (.....)

19. How do you solve your problem in English subject ?

a. Ask my teacher

b. Ask my friend

c. Private class

d. Others (.....)

Students' score

20. How about your English score ?

a. Good

b. Enough

c. Bad

d. Others (.....)

The teacher's problems during teaching also saw in the result of questionnaire sheet. The questionnaire sheet for the teacher can be seen in table 3.3.

Table 3.3 Teacher's Questionnaire Sheet

1. What kind of techniques do you know ?
⇒
2. What are the advantages of those technique ?
⇒
3. While teaching learning process, what activity that students do?
⇒
4. Do your students have English text book ?
⇒
5. Do your students have English activity text book ?
⇒
6. What activity that mostly practice using English activity text book ?
⇒
7. Do you prepare the lesson plan ?
⇒
8. What is the most difficult material for students ?
⇒
9. What is the mean of students's score in grade X ?
⇒
10. Is there any factors that's caused the high/low score ?
⇒
11. How do you measure the students' achievement ?
⇒

Teacher, Medan,
Researcher,

NIP.	NIM.
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Based on the questionnaire sheets, researcher saw what was the most difficult material for students then the researcher solved the problem based on the data in questionnaire sheets.

The data was collected based on the procedure of conducting classroom action research. There was 2 cycles. It was started from the cycle I, then because the result was not good, the cycle II was run. The research covered some phases: planning, action, observation, and reflection.

1. Cycle I

The cycle I was done in 3 meetings. There was 4 steps in the cycle I, they were :

a. Planning

Before running the cycle I, the preliminary test had been done to know the basic students' ability in writing procedure text. . Before entering the class, all the instruments had been prepared well, such as questionnaire sheets and observation sheets. In this step, the researcher designed a lesson plan. The material and the assessment also had been prepared. The researcher prepared the material, procedure text, not only from the text book, but also from the internet. The researcher also made the example of writing procedure text using mind mapping. In this research, the researcher became a teacher and the English became an observer during teaching learning process.

b. Action

The lesson plan that had been designed would be run in this step. The students taught based on the lesson plan, they were taught about writing procedure text using mind mapping. The teacher explained about writing procedure text and gave the example. During the explanation, the teacher drawn the mind mapping on the whiteboard. She explained the general stucture and the language features of procedure

text using mind mapping technique. In the end of the class, the students were asked to write the procedure text individually.

c. Observation

During the teaching learning process, the writer as the teacher was observed by the observer. From the result of the observation, it was found that the teaching learning process run well. It can be seen from the situation during the teaching learning process. The teacher can handle the class and also mastered the material. Besides, the students were interested learning writing using mind mapping because they did not know yet about that technique.

Table 3.4 Observation Sheet 1

ASPECTS	INDICATORS	SCORE				
		1	2	3	4	5
Opening the class	<ol style="list-style-type: none"> 1. Teacher comes to the class on time 2. Teacher greats the students 3. Teacher gives the pre-test 4. Teacher gives chance to the students to answer the pre-test 5. Students come to the class 6. Students answer the teacher's greeting 7. Students do the pre-test 					
During the Class	<ol style="list-style-type: none"> 1. Teacher explains the materials 2. Teacher is serious during the class 3. Teacher gives task to the students 4. Teacher monitors all the students 5. Students listen to the teacher's 					

	<p>explanation</p> <p>6. Students' are serious during the class</p> <p>7. Students do the task</p>					
Closing the Class	<p>1. Teacher and students sum up the materials</p> <p>2. Teacher tells about the material next week</p>					
Total						
Total Score						

Based on Amman (2008) :

5 = Excellent

4 = Very Good

3 = Average

2 = Fair

1 = Poor

d. Reflection

Reflection was the evaluation of all the action in the cycle I. The function of reflection was to show the problems and situations during the cycle I was done. Based on the reflection, the writer can fix what should be fixed to make the improvement in the next cycle. In the first cycle, there was an improvement on the students' score in writing, but some students did not pass the standard score. There are some students who still got score low. From that result, the writer decided to do the cycle II to get the better scoring test.

2. Cycle II

Based on the result in the first cycle, the writer decided to do the second cycle. There were also 4 steps in the second cycle.

a. Planning

The material and the goal in the second cycle was the same as the first cycle. In the second cycle, the writer as a teacher also explained about writing procedure text using mind mapping technique. But in the second cycle, the teacher gave more examples about procedure text and explained it using mind mapping. In this cycle, the teacher would be more active monitoring the students' activities and answered their questions more clearly.

b. Action

In this step, the teacher explained more about procedure text and gave more examples. The teacher explained using mind mapping technique. For example, the teacher gave them the example of procedure text, the title was "How to Make a Fried Rice". The text was arranged randomly. Then the students were asked to arrange the text using mind mapping technique. After that, the students were asked to make their own procedure text using mind mapping technique. They were asked to make their own mind map in their book, after that they decided their own topic in the center of the mind map. Then they made the branches related to the topic. When the mind map was done, they started to write their procedure text in order.

c. Observation

In this second cycle, the teacher was still observed by the observer. the result of the observation was there was an improvement situation in the second cycle. For instance, the students be more active in this cycle, they did not feel shy if they wanted to ask about the material. The teacher responded better for each questions. Both teacher and students enjoyed the class, so the students' score were improved significantly in this cycle.

d. Reflection

Based on students' writing score and the result on the observation in the cycle II, it was concluded that the students made the improvement in writing procedure text. It could be seen in their scoring test and the situation during the teaching learning process. At the preliminary test, there was only 1 student who got score up to 70. In the cycle I, the

students who got score up to 70 were 7 students. In the cycle II, many students got the score up to 70. It meant that they passed the standar score. There was a significant improvement in the cycle II, from 15 students, the students who got score up tp 70 was 11 students. The students' achievement in writing procedure text were improved using mind mapping technique.

Scoring the Test

Jacobs in Weigle (2009:116) asserts that there are five indicators to consider in writing test. Namely content, organization, vocabulary, language use, and mechanics. The explanation of those categories can be seen in table 3.6.

Table 3.6 Scoring of Writing Test

CONTENT	30-27	EXCELLENT TO VERY GOOD <ul style="list-style-type: none"> - knowledgable - substantive - thorough development of thesis - relevant to assigned topic
	26-22	GOOD TO AVERAGE <ul style="list-style-type: none"> - some knowledge of subject - adequate range - limited development of thesis - mostly relevant to topic, but lacks detail
	21-17	FAIR TO POOR <ul style="list-style-type: none"> - limited knowledge of subject - little substance - inadequate development of topic
	16-13	VERY POOR <ul style="list-style-type: none"> - does not show knowledge of subject - non-substantive - not pertinent - not enough to evaluate

ORGANIZATION	20-18	EXCELLENT TO VERY GOOD <ul style="list-style-type: none"> - fluent expression - ideas clearly stated/supported - succinct - well-organized - logical sequencing - cohesive
	17-14	GOOD TO AVERAGE <ul style="list-style-type: none"> - somewhat choppy - loosely organized but main ideas stand out - limited support - logical but incomplete sequencing
	13-10	FAIR TO POOR <ul style="list-style-type: none"> - non-fluent - ideas confused or disconnected - lacks logical sequencing and development
	9-7	VERY POOR <ul style="list-style-type: none"> - does not communicate - no organization - not enough to evaluate
VOCABULARY	20-18	EXCELLENT TO VERY GOOD <ul style="list-style-type: none"> - sophisticated range - effective word/idiom choice and usage - word form mastery - appropriate register
	17-14	GOOD TO AVERAGE <ul style="list-style-type: none"> - adequate range - occasional errors of words or idiom form, choice, usage, but meaning not obscured
	13-10	FAIR TO POOR <ul style="list-style-type: none"> - limited range - frequent errors of word/idiom form, choice

		usage - meaning confused or obscured
	9-7	VERY POOR - essentially translation - little knowledge of English vocabulary, idioms, word form - not enough to evaluate
LANGUAGE USE	25-22	EXCELLENT TO VERY GOOD - effective complex constructions - few errors of agreement, tense, number, word order/function, articles, pronouns, prepositions
	21-18	GOOD TO AVERAGE - effective but simple constructions - minor problems in complex constructions - several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions, but meaning seldom obscured
	17-11	FAIR TO POOR - major problems in simple/complex constructions - frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions, and/or fragments, run-ons, deletions - meaning confused or obscured
	10-5	VERY POOR - virtually no mastery of sentence construction rules - dominated by errors - does not communicate - not enough to evaluate

MECHANICS	5	EXCELLENT TO VERY GOOD <ul style="list-style-type: none"> - demonstrates mastery of conventions - few errors of spelling, punctuation, capitalization, paragraphing
	4	GOOD TO AVERAGE <ul style="list-style-type: none"> - occasional errors of spelling, punctuation, capitalization, paragraphing, but meaning not obscured
	3	FAIR TO POOR <ul style="list-style-type: none"> - frequent errors of spelling, punctuation, capitalization, paragraphing - poor handwriting - meaning confused or obscured
	2	VERY POOR <ul style="list-style-type: none"> - no mastery of conventions - dominated by errors of spelling, punctuation, capitalization, paragraphing - handwriting - illegible - not enough to evaluate

Technique of Data Analysis

This study use qualitative and quantitative data. The qualitative data is used to analyze data that cannot be measured. It is analyzed from the observation sheets to describe the improvement of the students writing procedure text through mind mapping technique. The quantitative data is used to analyze data that can be measured. It is analyzed by computing the students' score in writing the procedure text. To collect the data, the writer observe the activities through mind mapping technique as their concern to write the achievement of the students in writing procedure text. To know the mean of students' score for each cycle, the following formula was applied:

$$\bar{X} = \frac{\sum X}{N} \times 100$$

Where :

\bar{X} = the mean of the students

$\sum X$ = the total score

N = the number of the students (Sudjana, 2010)

Next, to categorize the number of master students, the writer continued it by applying the following formula:

$$P = \frac{R}{T} \times 100\%$$

Where:

P = the percentage of students who get the score up to 70

R = number of the students who get the score up to 70

T = the total number of students taking the test (Sudijono, 2007)

RESULTS AND DISCUSSION

Both quantitative and qualitative data were organized from the whole meetings. The teacher interviewed both the teacher and the students about their problems in teaching and writing procedure text. Before run the cycle I, the teacher gave the preliminary test to see the students' ability in writing procedure text. From the result of the score in the preliminary test, it found that the students' ability in writing procedure text were very low. They had many problems in writing procedure text. For example, the students lack of vocabularies and they felt difficult gathering their ideas into a good paragraph.

In the cycle I, teacher started to teach writing procedure text using mind mapping technique. In the end of cycle I, the teacher gave a test and the students' score was improved, but there were still many students who got the low score. Based on the reflection in the cyle I, the teacher decided to do the cycle II. There were a significant improvement in students score in writing procedure text in the cycle II. The students who got the score up to 70 were improved, it can be seen in the table 4.4.

Table 4.3 The Percentage of Master Students

Test	Students who got score up to 70	Percentage
Pre test	1	0.067%
Cycle I	7	0.47%
Cycle II	11	0.73%

In pre-test, it was only 1 student who got score up to 70, the percentage is only 0.067%. It happened because the students' knowledge about procedure text was very low, they also had problems in gathering ideas and lack of vocabularies. Besides, their teacher tend to teach them in traditional method. Then in cycle I, the writer explained about procedure text, she also explained about simple present as the tense that used in procedure text. Then she got that there was an improvement in students' score, the number of students who got score up to 70 was 7 students and the percentage is 0.47%. Moreover, in the cycle II, the writer re-explained about procedure text, simple present, and she added the explanation about the using of imperative in procedure text. There was also a significant improvement, the number of students who got score up to 70 was 11 students and the percentage is 0.73%. From that data, it can be said that teaching writing procedure text using mind mapping technique improve the students' achievement.

CONCLUSIONS

After analyzing the data, conclusion are drawn as the following. There was an improvement in students' achievement in writing procedure text. Their score had been very low before they were taught writing procedure text by using mind mapping. After the application of mind mapping technique in cycle I and II, there was a significant improvement. This implies that the students' achievement in writing procedure text can be improved using mind mapping technique.

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