THE EFFECT OF MIND MAPPING TECHNIQUE TOWARDS STUDENTS' STRATEGY IN ENGLISH WRITING SKILL AT TENTH GRADE OF SMK NUR HASANAH 2 MEDAN

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Abstract
This study aims to determine the improvement achieved by students in their English writing skills by using the mind mapping technique. This research was conducted by applying quantitative research methods and experimental research designs consisting of pre-test, treatment and post-test to improve students' English writing skills using the mind mapping technique in class X SMK Nur Hasanah 2 Medan. The instruments used were descriptive text writing materials based on the topics given, written tests, mind mapping techniques that were corrected by students and lesson plans. To assess students' ability to write descriptive text, several criteria are used. The cumulative score ranges from (0-100). To determine student achievement in writing there are several criteria that are considered to have five scales of assessment components namely content, organization, vocabulary, use of language, and mechanism. After analyzing the data, it was concluded that there was a significant effectiveness of using the mind mapping technique on students' writing skills. The findings show that the t (effect) score is 1.801. Therefore, the effect of using the mind mapping technique has a significant effect on student achievement in writing skills.

Keywords— mind mapping Techniques, students' strategy, writing skills

Introduction

     English is used in many countries as a means of communication. In Indonesia, English have to teach from elementary school up to university. The purpose of teaching English is to enable the student to master English, so they can apply it in communication. In teaching and learning English as a foreign or second language especially to young learners, the four English skills, writing, listening, speaking, and reading, should not be separated one another. Among the four language skills mentioned a, writing skill is one of the two skills which are tested in the final evaluation. Writing as the productive skill is considered to be more difficult than any other productive skill. Students face difficulties and commit errors in many different writing skills, especially in mechanics (Abdusalam & Mujiyanto, 2017). Therefore, it can be assumed that writing skill is one of the most important skills in the teaching of English in Indonesia. In the process of teaching and learning, students face many difficulties in writing skills. They think that writing is difficult because writing skills are complex and difficult to teach. This means that students must master written English but they find many difficulties how to learn to write. Because the writer found that the students had difficulty in writing the text well.

     Based on the author's observation, students face difficulties due to reluctance to ask questions or lack of motivation, difficulty building and developing their ideas, use of grammar and confusion in determining the structure of the text in general. Writing is an important, constructive, and complex integrative and process skill (Faridi, 2017). The cause of low student achievement in writing is not only from the students themselves but also from the teacher. Conventional learning techniques and strategies that teachers apply in learning writing skills are not effective. During learning activities in class, the teacher only asks students to read the text, translate the text using Google Translate and rewrite the translation. Students are not asked to practice their writing skills. In addition, the teacher never makes variations in the teaching and learning process. Teachers must create interesting activities

in the classroom so that students can develop their ideas in written form.

According to Tony Buzan (2009), Mind mapping is an application that gives us the meaningful information to understand in a simple way. Mind Mapping Technique prepares the mind in a way that information can be used in logical and imaginary way to make an image in the brain. In Mind Mapping Technique first main idea is specified and then the linear view is explained. It is also useful for self and group in which it can have more effect than written review. This method is suitable for teachers and students for the recurrence and easy to understand hard topics. In addition, it also promotes student knowledge. This technique increases the creative power in new concepts and help to increase your motivation to study the students. Based on the explanation above, the researchers conducted a mini research entitled: "The Effect of Mind Mapping Technique Toward Students' Strategy in English Writing Skill at Tenth Grade of SMK NUR HASANAH 2 MEDAN".

In this study, the problems are formulated in the form of question, they are:

"Does mind mapping technique significantly give the effect for students' strategy in english writing skill?"

Literature Review

Writing is one of the productive skills besides speaking (Harmer, 2007) that students must master. One of the written texts that must be produced by students at school. Meanwhile according to Raimes (as cited in Khoiriyah, 2014) affirmed that writing has been important skill for students because of some reasons: first, writing strengthens the students' grammatical structure, idiom and vocabulary. Second, writing has given a chance to students to apply the language they have learned. Third, writing has reinforced students to express their ideas in correct words and sentences. Writing as the productive skill is considered to be more difficult than any other productive skill. Students face difficulties and commit errors in many different writing skills, especially in mechanics (Abdusalam & Mujiyanto, 2017).

There are five characteristics of good writing according to Harmer (2007), namely: organization, content, grammar, vocabulary and mechanics. The first is organization. Writing should contain logical or associative connections and transitions that clearly express the relationships of the ideas being described. It contains ideas, and is supported by supporting sentences. Supporting sentences must be well structured so that the reader can easily understand the text. The second is the content, meaning good writing, the sentences are easy for the reader to read. Readers can understand the purpose of writing easily. The third is grammar. Grammar is connecting words into good sentences. The author uses the right tenses to bring out the meaning clearly. Writing should convey the main idea. The author's substance is the idea expressed. Next, vocabulary. Vocabulary is the basis that must be used by students during the writing process. To have good writing, students must have sufficient vocabulary to support their writing. The last one is mechanics. Mechanics in writing include punctuation, spelling, and capitalization. Punctuation is a symbol to mark sentences, spelling is a way of writing certain words and capitalization is the beginning of a word with a capital letter. Good mechanics will make it easier for readers to catch written messages. The five aspects mentioned above will become a benchmark for student achievement in learning to write. In addition, writing can facilitate students to learn English better. This research focuses on vocational school students who must be able to write using mind mapping techniques. After knowing what writing is, writing skills and what are the characteristics of good writing, we must know what mind mapping is, because in this study mind mapping is one of the techniques used to investigate student development in learning writing strategies.

A mind map is a diagram used to represent words, ideas, tasks, or other items linked to and arranged around a central key word or idea. Mind maps are used to generate, visualize, structure, and classify ideas, and as an aid in study, organization, problem solving, decision making, and writing. According to Kotob, Styger and Richardson (2016) mind mapping is a technique for conveying effective and creative thoughts. This technique helps in organizing and presenting research concepts visually around key words or main ideas. In other words, Alamsyah (2009) argues that mind mapping is a useful technique that helps you learn more effectively, improves the way you record information, and supports and enhances creative problem solving. Mind mapping is a great tool to help you write a good structure on which to focus your essay. Mind maps help you present all the features of an

argument and objectively judge what arguments and essay structures make sense. Mind map not only helps you to plan what you want to write, but also useful when you write completely as stated by Buzan (2006).

According to Joyce (2014), there are several procedures of teaching writing using mind mapping technique that teacher could apply in the class, they are: explaining Mind Mapping technique, the teacher needs to explain about mind mapping using examples and comparing it to regular brainstorming. Brainstorming is an activity with which most people are familiar. The object in brainstorming is to compile as large a list as possible of potential examples for a given topic. That is a great activity to do in a small group with the entire class. The students could make the mind mapping started from the topic in the middle and the proceeds with keywords that branch off the main topic. The second is making choice. The next procedure that the teacher could do is to ask the students to evaluate how they feel about what is on their map. The teacher might ensure about what ideas that they might want to write about. So, the teacher could tell the students to be not included everything that is on the map; thestudents could erase, edit, and revise it as they move forward.

Once students clearly understand the ideas they have put on their map, the teacher can ask them to start writing. They could use much of the same language they had written in. It makes composition tasks much more manageable and gives them a concrete reference tool. Students generally switch from the mind map activity to the writing process with more enthusiasm and direction. The last thing is customizing it. Writing teachers can use mind mapping based on the level of students they meet. For example, lower level students can use mind maps by attracting them with colors or pictures they can creatively come up with. By following each step in applying Mind Mapping learning, teachers can apply this technique in teaching writing successfully. The most important step is to ensure that students understand how to make maps and teachers need to adapt this technique in learning writing strategies depending on the level of students.

Research Method

This research was conducted using quantitative descriptive research. This research was conducted by collecting data and scoring answers. This will describe students' ability to write English using the mind mapping technique. In accordance with the title, problems, objectives, and hypotheses, this type of research is evaluation. It is called evaluation because research as a contribution for students to know English ability is writing. In this study, the researcher wanted to know the effect of the mind mapping technique on the writing ability of class X students at SMK Nur Hasanah 2 Medan. The population of this study were all classes of SMK Nur Hasanah 2 Medan. The samples are class X-1 and X-2 with a control group and an experimental group.

Data obtained by giving tests to respondents. Test items are arranged in such a way that aspects of knowledge and understanding can be achieved, students are required to understand what these words mean. Students are given some instructions about the research tests that will be collected and the researcher will look for the average of the test results.

Results and Discussions

The writer would like to present the results of research findings from this study. The first part was the presentation of data. This section discusses the findings of survey and experimental research. Presentation of survey data focused on test results and related to student scores on the pre-test and post-test in both groups, experimental and control. The second part was data analysis. This section presents a statistical calculation of the pre-test and post-test data, which verifies the use of the mind mapping technique for students' writing skills. Finally, the third part was discussion. This section provides a detailed discussion of the results of the data analysis. The following are the results of the pre-test and post-test of the two groups. Namely, the control group and the experimental group.

Table 4.1 The Result of Pre Test and Post Test of the Control Group

No	Student's Initial	Score of Pre Test	Score of Post Test	Deviation (d)	(dy)= d-My	Square of Deviation (dy²)
1	A	70	89	19	7	49
2	AT	68	81	13	1	1

3	CM	68	85	17	5	25
4	DYL	72	79	7	-5	25
5	EE	68	85	17	5	25
6	FDS	72	84	12	0	0
7	IR	78	82	4	-8	64
8	JD	65	80	15	3	9
9	L	73	78	5	-7	49
10	MA	75	80	5	-7	49
11	MPD	68	83	15	3	9
12	N	68	80	12	0	0
13	NC	68	79	11	-1	1
14	NAS	73	80	7	-5	25
15	NUH	68	80	12	0	0
16	PNS	73	85	12	0	0
17	PRP	68	83	15	3	9
18	RAS	78	88	10	-2	4
19	RS	68	83	15	3	9
20	SH	60	80	12	0	0
	Total	**1409**	**1644**	**235**	**-5**	**353**

Determining mean the result test of the students. The calculation of the mean of control group is as follow:

$$My = \frac{\sum d}{N}$$
$$My = \frac{235}{20}$$
$$= 12$$

Table 4.2 The Result of Pre Test and Post Test of the Experimental Group

No	Student's Initial	Score of Pre Test	Score of Post Test	Deviation (d)	dx= d-Mx	Square of Deviation (dx^2)
1	AK	60	82	22	6	36
2	DNP	60	86	26	10	100
3	EW	75	92	17	1	1
4	ES	75	90	15	-1	1
5	FA	75	80	5	-11	121
6	H	70	80	10	-6	36
7	IR	80	95	15	-1	1
8	JA	75	80	5	-11	121
9	K	65	80	15	-1	1
10	MFT	65	85	20	4	16
11	NP	68	84	16	0	0
12	NAP	60	86	26	10	100
13	RA	75	88	13	-3	9
14	RA	75	80	5	-11	121
15	SH	68	85	17	1	1
16	SO	70	87	17	1	1
17	TAW	75	88	13	-3	9
18	WAA	65	88	23	7	49
19	YMS	75	88	13	-3	9
20	YP	65	85	20	4	16
	Total	**1396**	**1709**	**313**	**-7**	**1531**

Determining mean the result test of the students. The calculation of the mean of experimental group is as follow:

$$\text{Mx} = \frac{\sum d}{N}$$
$$\text{Mx} = \frac{313}{20}$$
$$= 16$$

Based on the table above, there is a difference in scores between the pre-test and post-test of the control group and the experimental group. Calculation of the mean (Mx) number of deviations ($\sum$d) of the experimental group based on the table above, the total difference in scores between the pre-test and post-test of the experimental group is 313 and the average score is 16. Meanwhile, the mean value (My) is the calculation of the average score -the mean of the control group was 12 and the total difference in the pre-test and post-test scores of the control group was 235.
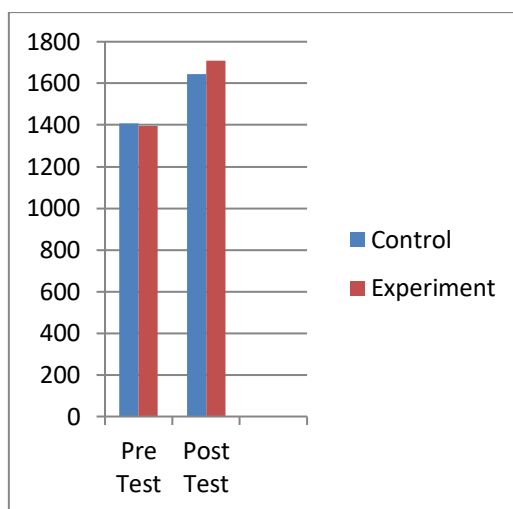

Chart 1 The Mean Score of Control and Experiment

Data analysis was performed by calculating the test results. This aims to determine the significant differences between teaching to motivate students' writing skills by applying the mind mapping technique. From the data analyzed above, the authors analyzed the data using the t-test to improve the hypothesis. There is a significant difference between the results of the pre-test and post-test, especially in the results of students' scores on writing activities. From the significant difference between the results of the pre-test and post-test, especially those related to writing activities, it is clear that the port students' English competence, especially writing activities, increases significantly by applying the mind mapping technique. The writer noticed that initially the students had to adapt themselves to write in English.

In the experimental group, learning by applying the mind mapping technique showed that the students' results for learning were not only studying grammar patterns, language structures, creativity, being active in the mind mapping technique but also how students' writing abilities were. By applying the mind mapping technique, students' abilities can be improved in real communication to encourage language learning. In using communicative strategies and approaches in class, students use language through media. Communicative activity is one of the media that can be used by teachers. As a result, in the post-test, there was a greater difference in students' writing activity in the experimental group compared to the control group. In the control group, students only used conventional methods. The teacher does not bring students to the process of learning to write which involves students to do, react, live and experience the actual situation and react to various aspects of the situation. The teacher asks students to write a paragraph or when they answer the teacher's question. There is no place for students to engage in real communication to promote language learning. Using communicative strategies and approaches also enables natural learning, where learning occurs within the learner and creates a context that supports learning. Communicative activities support individuals in this learning effort. In the experimental group, almost all students experienced an increase in post-test scores compared to the

pre-test. The value of students' writing activity is quite high. Students in the control group could not develop their writing skills because students could not use the language they knew to convey meaning as effectively as possible and furthermore students could not pay greater attention to the social context in which interactions occurred, so students could not apply the mind mapping technique.

Conclusion

In the control group, students only used traditional methods. In using traditional teaching methods, the teacher does not involve students in the learning process, especially the writing learning process which involves doing, reacting, living and experiencing through real situations and reacting to various aspects of these situations. Whereas in the experimental group, teaching using the mind mapping technique allowed students to learn, not only learning grammatical patterns but also how to write descriptive texts, and make mind maps and how to use their writing skills in a timely manner. By using the mind mapping technique, students can be improved in real communication to encourage language learning. In using a communicative approach in class, students use language through the media. Communicative activity is one of the media that can be used by teachers. As a result, in the post-test, there was a greater difference in students' writing activity in the experimental group compared to the control group. After analyzing the data, it was concluded that there was a significant effectiveness of using the mind mapping technique on students' writing skills. The findings show that the t score (effect) is 1801. Therefore the effect of using the mind mapping technique has a significant effect on students' achievement in writing skills.

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