

THE EFFECTIVENESS OF USING MIND MAPPING TECHNIQUE IN IMPROVING STUDENTS' WRITING SKILL

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui apakah penggunaan teknik pemetaan pikiran efektif dalam meningkatkan kemampuan menulis siswa kelas sembilan SMP Negeri 14 Palu. Penelitian ini menggunakan desain penelitian pre-eksperimental. Sampel penelitian ini mencakup 25 siswa kelas IX Cempaka yang dipilih menggunakan teknik purposive sampling. Instrumen pengumpulan data adalah sebuah tes esai yang dibagi dalam pre-test dan post-test. Bisa dilihat dari hasil analisis data menunjukkan bahwa ada perbedaan yang signifikan antara hasil pre-test dan post-test. Itu dibuktikan oleh nilai rata-rata dari hasil kedua tes dimana nilai rata-rata pada kelas eksperimental signifikan meningkat dari 68,27 ke 74,93. Berdasarkan hasil dari pre-test dan post-test, peneliti mendapatkan nilai T-hitung yaitu 6,54. Dengan menerapkan tingkat signifikansi 0.05, peneliti menemukan bahwa nilai dari T-table yaitu 1,711 dengan menunjukkan bahwa nilai dari T-hitung lebih tinggi dari nilai T-table. Ini berarti bahwa penggunaan dari teknik pemetaan pikiran efektif dalam meningkatkan kemampuan menulis siswa kelas sembilan SMP Negeri 14 Palu. Implikasi dari hasil penelitian ini bahwa teknik pemetaan pikiran dapat digunakan dalam mengajar dan belajar Bahasa Inggris khususnya dalam keterampilan menulis.

Kata Kunci: Keefektifan, Meningkatkan, Menulis, Teknik Pemetaan Pikiran.

ABSTRACT

The objective of this research is to find out if using mind mapping technique is effective in improving writing skill of grade nine students of SMP Negeri 14 Palu. This research used pre-experimental research design. The sample of this research included 25 students of grade IX Cempaka who were selected by using purposive sampling technique. The instrument of data collection was an essay test that was divided into pre-test and post-test. The results of the data analysis showed that there was a significant difference between the result of the pre-test and the post-test. It indicates by the mean score of both tests results where the mean score of the experimental class significantly increased from 68.27 to 74.93. Based on the result of pre-test and post-test, the researchers found that the value of t-counted is 6.54. By applying a degree of freedom (df) 24 (25-1) and 0.05 level of significance, the researchers found that the value of t-table is 1.711 which showed that the value of t-counted was higher than t-table. It means that the use of mind mapping technique is effective in improving students' writing skill of grade nine students of SMP Negeri 14 Palu. The implication of this finding is that mind mapping technique can be used in teaching and learning English especially in writing skill.

Keywords: Effectiveness, Improving, writing, Mind Mapping Technique.

INTRODUCTION

Writing is an activity to interact with other people. People can express their ideas, thoughts, feelings, and emotions in written languages. In the writing process of sending messages to others, people move their thoughts from their heads into a set of phrases, sentences, and paragraphs in order to communicate with others. Furthermore, writing is a component of English language skills. In most cases, students should master four skills when learning a language. They are listening, speaking, reading, and writing. One of them which is difficult to master is writing because it involves vocabulary, mechanics, and organization.

Writing procedure text is taught by the teacher so that students know the procedure of how to make food and operate electronic devices. A procedure text is a piece of text that gives us instructions for doing something. By following the instructions, students can make and know the information. Procedure text is learned not only at school but also it is found in daily life. Students can find procedure text in game rules, cooking recipes, and using ATM (Automatic Teller Machine). Those are helpful for the students in learning procedure text because it is easy for them to get information about the text to complement the learning material that they have learned. Therefore, if they are asked to write a recipe or instruction to make something, they will try to recall the information that they have gotten from their environment, and then they are able to write the information.

In curriculum 2013, procedure text becomes one of many texts learned by students at school. Procedure text taught on grade nine students of Junior High school, especially in the first semester. According to the basic competency that students must achieve in writing English subject is the ability to develop and produce written simple functional text. However, the writing ability of grade nine still creates disappointment among students and the teachers as well.

Based on the preliminary research interviews with an English teacher at SMP Negeri 14 Palu, that students always get the same problems in learning procedure text. In other words, this problem occurs over and over again every year. The first problem is the students have less prior knowledge and less experience so they get difficulties to arrange well the steps of procedure text. The second problem is the students have lack

of vocabulary. Students got difficulties to understand the meaning of the words and make incorrect spelling. And the other problem is the students often make mistakes in punctuation and capitalizations.

The researchers used mind mapping technique to support the students in writing procedure text. Buzan (2007) says that by using mind mapping, people can represent ideas into visualization and graphic forms where one idea is connected to another idea by using branches. Besides that, he also says using mind mapping can make people easy to put information into their memory. Purnomo (2014:248) also states “Mind mapping can make students easily to remember things which they want to describe”. It should be noted that mind mapping is good for teaching and learning English. There are several advantages of using mind mapping technique. First, students can memorize everything permanently. Second, students can master the fact, number and the formula easily. Third, students can increase the concentration and motivation. Fourth, students can memorize the name, the events in history, and the drama text. Fifth, students can memorize again the information easily. Last, students can decrease a half of the studying time.

There are some related studies relevant to this research. Those studies have been conducted previously by many researchers. Firstly, a study conducted by Eliyani (2017). She used mind mapping technique on students’ ability in writing procedure text at the seventh grade of Junior High School 1 Seberida. The result of the study showed that mind mapping technique has a significant effect on students writing procedure text ability. Second, a study conducted by Basri and Syamsia (2020). They used mind mapping method in teaching and learning writing descriptive text. The result of their study was mind mapping has a positive influence on writing the descriptive text for the grade 11th students of SMK Muhammadiyah Tidore Kepulauan. Third, a study conducted by Waloyo (2017). He applied the same techniques to investigate the implementation of mind mapping technique in teaching writing narrative text at the eleventh-grade students of a social class of Madrasah Aliyah Negeri 13 Jakarta. The research finding of this study showed that mind mapping has a good influence on the students’ writing skill.

The other research that the researcher found was a study conducted by Suyanto (2015). He used mind mapping technique in teaching writing. The result of the study

was mind mapping can improve students' writing skill of the first level at SMPN 1 Prambon Nganjuk. Next, a study conducted by Rahmawati (2015). She implemented mind mapping in teaching writing of recount text to eighth grade of junior high school. The result of the study showed that mind mapping is helpful in assisting the students create their own personal recount text. Next, a study was conducted by Saori (2020). This technique was used in teaching reading comprehension in first-year students of Nabi' Nubu Islamic Senior High School. The result showed that the use of mind mapping has a significant effect on students' reading comprehension. And last, a study was conducted by Sirait, Pangaribuan, and Tarigan (2018). They also applied the same technique in teaching vocabulary to the eighth-grade students of SMP Santo Thomas 3 Medan. The result of the study showed that mind mapping technique gives improvement to students' vocabulary. From the result of the research studies above, the researchers assumed that the use of mind mapping can help the students and the teachers to solve problems in teaching and learning English.

This research focuses on using mind mapping technique to improve the writing procedure text to the grade nine students of SMP Negeri 14 Palu and highlight on use of vocabulary, organization, and mechanics (punctuations, spelling, and capitalizations). Below is the formulated research question: "Is using mind mapping technique be effective to improve the writing skill of grade nine students of SMP Negeri 14 Palu?"

METHOD

This research used a pre-experimental research design. It is the type of research that has only one class as an object. The class is called the experimental group. The researchers gave pretest and posttest to the experimental group. The experimental group had treated by using mind mapping technique after the pretest. The design of this research was proposed by Cohen, Manion, Marrison (2005:212-213).

Where:

O1 X O2

O1 : Pre-test

X : Treatment

O2 : Post-test

The population is needed by every researcher when conducting research. The population of this research was the grade nine students of SMP Negeri 14 Palu. The

total numbers of population were 122 students and divided into 4 classes. Sample is a small part of the population. Best defines (2006, p. 13) “A sample is a small proportion of the population that is selected for observation and analysis.” In selecting the sample, the researchers used the purposive sampling technique. It means the sample is selected based on the specific purpose. The researchers chose IX Cempaka of SMP N 14 Palu as the sample of this research. There were 32 students from class IX Cempaka but only 25 students can participate in this research because not all of the students have supporting facilities for online learning. The researchers only took students with 70% of total attendance at the meetings.

The instrument in collecting the data of this research was written tests in form of an essay on given topics. Test as the instrument was divided into two parts, those were pre-test and post-test. The pre-test was given to students in the first meeting before they received the treatment using the mind mapping technique and in the last meeting, students were given a post-test after they received the treatment. The students wrote procedure text based on the topics that were given by the researchers.

In analyzing the data, the researchers used simple statistical analysis. Firstly, the researchers computed the individual score by applying the formula recommended by Arikunto (2006, p. 276). Secondly, the researchers computed the mean score of students by using the formula adapted from Arikunto (2006, p. 306). Thirdly, the researchers computed the mean deviation differences of pre-test and post-test by using the formula stated by Arikunto (2014, p. 350). After that, the square deviation was computed by using the formula proposed by Arikunto (2014, p. 351). Last, the researchers computed t-counted in order to analyze the effectiveness of the treatment by using the formula proposed by Arikunto (2014, p. 349) as follows:

$$t = \frac{Md}{\frac{\sqrt{\sum x^2 d}}{N(N-1)}}$$

FINDINGS AND DISCUSSION

FINDINGS

To find out the result of the test, the researchers examined the student before and after treatment. The pre-test was used to measure the students' writing skill before treatment. The post-test was given after the class got treatment by using mind mapping

technique. The data collection was conducted from August 30th until September 24th, 2021. The meeting was conducted twice a week with 80 minutes each meeting. The main reason for testing the students was to verify whether applying the Mind Mapping Technique could be effective to improve students' writing skill at the grade nine students of SMPN 14 Palu or not. The test was making a procedure text using given topics. The test was given to the students in the pre -test and post-test.

Table 1 Result of the students Pre-test and Post-test

No	Individual Score	
	Pre-test	Post-test
1	53.33	53.33
2	60	66.67
3	80	86.67
4	66.67	73.33
5	80	86.67
6	66.67	73.33
7	60	60
8	73.33	86.67
9	53.33	73.33
10	73.33	80
11	60	60
12	66.67	80
13	80	86.67
14	73.33	73.33
15	86.67	93.33
16	73.33	80
17	66.67	66.67
18	46.67	46.67
19	60	66.67
20	73.33	80
21	73.33	80
22	60	66.67
23	73.33	86.67
24	73.33	86.67
25	73.33	80
TOTAL	1706.67	1873.33
MEAN	68.27	74.93
SCORE		

By looking at the table above, showed that the highest score in the pretest was 86.67 while the lowest score in the pretest was 46.67. The minimum score or KKM

(Kriteria Ketuntasan Minimal) at SMPN 14 Palu is 75, it indicated that there were four students who passed the KKM. Then, the researchers counted the mean score of the experimental group. The researchers got the mean score of students in the pretest was 68.27. Next, the highest score of the students in the post-test was 93.33 and the lowest score was 46.67. The mean score of the experimental group in the posttest was 74.93. The data analysis above showed that, the researchers found that the mean score of both tests are different. Based on the result of the mean score of post-test, it proved that the student's achievement in the post-test or treatment increased from 68.27 to 74.93. Thus, the mean score of pre-test is higher than the mean score of the post-test. After getting the mean score of pre-test and post-test, the researchers calculated the deviation and square deviation of experimental class. Based on the calculation, it was found that the total deviation score of the experimental group was 166.67 and the square deviation score of experimental group was 1733.33. Next, the researchers counted the mean score of square deviation, the mean score of deviation that the researcher found was 6.67.

Table 2 Result of Deviation Score and Square Deviation

Group	Deviation Score	Square Deviation Score
Experimental	166.67	1733.33

After obtaining the result of square deviation, the researchers analyzed the data to know the significant difference between pre-test and post-test or testing hypothesis by using t-counted formula from Arikunto (2006). Based on the computation, the t-counted value was 6.54. After that, to determine whether the hypothesis is accepted or rejected, the researchers counted the t-table by applying the degree of freedom ($df = N - 1 = 25 - 1 = 24$) with the level of significance 0.05. The researchers found that the t-table value was 1.711. Based on the result, the researchers concluded that the hypothesis of this research was accepted because the t-counted value (6.54) was higher than the t-table (1.711). In conclusion, the use of Mind Mapping Technique is effective to improve the students' skills in writing procedure text.

DISCUSSION

In this section, the researcher would like to discuss all the research findings. The finding was related the improvement of the grade nine students' writing procedure text using mind mapping technique at SMP Negeri 14 Palu. The researcher determined that this research focused on the content and the components of writing especially on vocabulary, organization, and mechanics.

Before giving the treatment, the researcher conducted pretest for the experimental group. The purpose of the pre-test was to know the students' competence in writing procedure text. On the result of students' experimental group pretest, only four students who passed the test because several students in the experimental class got a score under the minimum score (75). The percentage of the students who got lower score than the minimum score was 84% and only 16% students who got score more than 75.

In the pretest, the researcher asked students to make simple procedure text about "How to Make a Cup Coffee". Then, the researcher provided the result of the pre-test in the experimental group which total score in the organization was 72, vocabulary was 96, and the mechanic was 88. This result showed that the big problem in the students' writing was in organization.

After giving the pre-test, the researcher gave the treatment to the experimental class for six meetings. The researcher treated the students through Zoom Meeting because students had online class during this research. The researcher chose similar topics at every meeting based on the syllabus. During the meetings, the researcher guided the students to make mind mapping on the topic that was chosen by the researcher. Thus, the researcher explained how to make mind mapping, the definition of procedure text, characteristics of procedure text, and gave examples of procedure text using mind mapping.

After finishing the treatment, the researcher gave the post-test to the students to measure the students' progress. Based on the result of the post-test of the experimental group was that 52% students got score more than the minimum score (75). It has increased 36% from the result of the pretest score which 84% students got score lower than the minimum score. Next, the researcher found that the total score of the experimental group was 81 in the organization, 108 in vocabulary, and 92 in mechanics. Thus, the result presents a fact that mind mapping technique is effective for the students to improve their writing procedure text.

Regarding to the findings of this study, it is also supported by several previous researchers; first, Eliyani (2017). She did a treatment to the seventh grade of Junior High School 1 Seberida to improve students' ability in writing procedure text using mind mapping technique. Second, Basri and Syamsia (2020). They discussed about mind mapping has a positive influence on writing the descriptive text for the grade 11th students of SMK Muhammadiyah Tidore Kepulauan. Third, Waloyo (2017). He discussed about how students' writing narrative text at the eleventh-grade students of a social class of Madrasah Aliyah Negeri 13 Jakarta was improved as a result of implementation of mind mapping as a technique in teaching writing. Next, Suyanto (2015). He did a treatment to the first level at SMPN 1 Prambon Nganjuk in teaching writing using mind mapping technique. Last, Rahmawati (2015). She discussed about the result of how implemented mind mapping in teaching writing of recount text to eighth grade of junior high school. Based on these findings, the researcher may conclude that mind mapping technique is effective to improve the students' writing skill, especially in writing a procedure text.

CONCLUSION

The researchers conclude that the use of Mind Mapping Technique can improve the writing procedure text of the grade nine students of SMP Negeri 14 Palu. The post-test result shows that there is a significant difference between the results of the pre-test and the post-test. Before the researchers gave the treatment, the mean score of pre-test was 68.27, while after treatment, the mean score of post-test raised to 74.93. Therefore, the research hypothesis indicates that t -counted (6.54) is greater than t -table (1.711). Thus, the research hypothesis is accepted.

ACKNOWLEDGMENT

The researchers give all their praises to the almighty God, Allah SWT, for all blessing, mercy, health, and opportunity given to them so that they are able to complete this research. Their special honors fall to all of the lecturers of the English Education Study Program of Tadulako University. The researchers also do not forget to thank to the English teacher and students of the ninth grade of SMP Negeri 14 Palu who willingly contributed their valuable time for their participation in this research.

Moreover, the researchers would like to expressed their deepest thank to the people who are important and meaningful in their life especially to their beloved family and all of their best friends that always support and pray for them.

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