THE EFFECT OF SEMANTIC MAPPING IN TEACHING WRITING SKILL ON SEVENTH GRADE STUDENTS OF SMPN 3 BATUSANGKAR

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Abstract
This research was aimed to see the effectiveness of semantic mapping technique in improving students’ writing skill. The research design of this research was a quasi experimental design. The population was the seventh grade students of SMP Negeri 3 Batusangkar in the academic year of 2017/2018. The samples consisted of 51 students, which divided into two groups; they were experimental group and control group. In order to collect data about students’ writing skill improvement and responses toward the implementation of semantic mapping technique, the writer used writing test. During the treatment, students in experimental group used semantic mapping technique, while students in control group used free writing technique. The analysis of the test result showed that the student of experimental group was higher than control group. In the post test, the mean score of the experimental group was 72,89 while the control group got 67,21. Based on statistical analysis by using t-test formula, indicated that the t-test was 1,94 and t-table was 1,67. It means that t-value was higher than t-table (1,94 >1,67). As a result, there is a significant difference in writing achievement between the students who are taught by using semantic mapping technique and those who are taught by using free writing technique. Based on the result of this study, the writer concluded that semantic mapping technique is effective to be implemented in teaching writing.

Keywords: Semantic Mapping Technique, Writing Skill, Quasi Experimental Study.

Introduction
Writing is one of language skills that more complex and difficult than others, because the students must master in grammar and vocabulary. To be able to communicate effectively in written form, the students should be capable on their writing skill. This is inline by Oxford University Press (2015), the students are rare in writing practice therefore the quality of their writing is not good.

Writing skills can help the students to become a good writer. Richard and Renandya (2000: 303) say that the students must plan and organize as well as possible for the spelling, word choice and punctuation to make a good writing. Writing skills also give the special instruction in spelling, handwriting, and key boarding. Besides that, writing skills can build the fluency and confidence for students and provide the variety of strategy and opportunity to apply it. In writing skills, the students are expected to understand the instruction involving grammar, usage, paragraph composition, and sentence structure.

In addition, Flachmann (2011:1) states that writing is the process of explaining what a words, an object, and or an idea is. A good definition focuses on what is special about a word, object, or idea and what sets it apart from similar words, objects, or ideas.

Brown (2001: 334) describes writing is a complex process and sometimes used as a production mode of learning, reinforcing or testing grammatical concept. It means that writing is used to measure students’ grammatical ability. And writing as a process of putting idea down on paper to transform thoughts into words, to sharp main ideas, and to give structure and coherence organization into the writing.

Writing is an activity where the students should master some skills such as arranging a good sentence, must have a lot of vocabulary, they must understand the organization, and also the language use. It is because
writing activity is a communication which is not face with the partner of communications, so the writer should make the reader understands well with their writing product by using the good arrangement of sentences. If the writer writes the wrong sentences and arranges some mistakes, the reader will have the wrong understanding and will have the different perception too. And the writer cannot correct it, so before the writer lets the reader reads the writing product, they should analyze it correctly and learn to be a good writer. From the procedural in doing writing that mention above, it makes a judgment that writing skill is the most difficult skill in learning English.

From the preliminary research conducted in SMPN 3 Batusangkar, it is found that the students got difficulties in writing. First when the researcher asked her students to do writing activity, the students did not write satisfyingly. Some of them could not arrange the sentences well. For example, in writing “murid pintar”, they wrote “Student Smart”. Next, the students are lack of grammar. They are not being able to produce their ideas into written form because they are lack of grammar. The other problems come from the teacher technique. Free writing technique is used by the teacher in the classroom. Teacher asks the students to write a text based on given example or give it as homework where the students can ask to their friend or copy the text from the other books or internet. It means, these situations made students are not creative in developing their ideas.

Previous research about the use of semantic mapping technique showed the positive finding. Based on the previous research entitled, “Improving Students’ writing skill Through Semantic Mapping Technique” by Ahmad Siddiq that explains about using semantic mapping technique in writing a paragraph and also explains about the stages of semantic mapping technique in writing a paragraph. From this research we know the technique is helpful for the students who like to do their thinking in a visual way. Semantic mapping expects that students become easy to get ideas, motivated, more confidence in writing. Thus, this technique has the positive effect on the teaching writing. And the positive effect of the technique will make the students feel enjoy with writing itself. Writing will not become a problem again when the students find and use the match technique.

Method

The design of this research was a quasi-experimental design. According to Creswell (2009: 154), quasi-experimental is a form of experimental research in which individuals are not randomly assigned to groups. In this study, non-equivalent control group design was used. A non-equivalent groups design includes an existing group of participants who receive a treatment and another existing group of participants to serve as a control group. The subject of this study was students of SMPN 3 Batusangkar in the academic year 2017/2018. The researcher divided the subject of the study into two groups, VII 3 assigned to experimental group and VII 1 as control group. During the treatment, students in experimental group used semantic mapping technique in teaching writing, while students in control group used free writing technique.

The instruments of collecting the data, the researcher used the test and questionnaire. The test intended to know the students’ writing ability of descriptive text. The researcher used post test only. Post test had been given to both students in experiment and control class. Before that, the students in both classes had been given different treatment. The students of experimental class were taught by semantic mapping in writing, while the students in control class were given the free writing technique. After that, the questionnaire was given by the researcher in order to know the contribution of reading habits in learning writing.

The result of test was analyzed using t-test formula to make sure whether there was a significant difference between pre-test and post-test between experimental and control groups or not and to know which strategy was more effective to improve students’ vocabulary mastery. However, the standard deviation should be computed before counting the t-test. The formula of standard deviation is as follows:

$$S = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}}$$

In which,

- $n_1$ = the number of students in experimental class
- $n_2$ = the number of students in control class
- $S$ = standard deviation complex
- $S_1^2$ = standard deviation experimental class
- $S_2^2$ = standard deviation control class

To find out the t-value of the significant difference between the two means of the pre-test and post-test, the formula is as follows:
\[ t = \frac{X_1 - X_2}{S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \]

In which,
\( T \) = the value of \( t \)-calculated
\( X_1 \) = mean of the experimental group
\( X_2 \) = mean of the control group
\( S \) = sum of squared deviation score of experimental group and control group
\( n_1 \) = number of experimental group
\( n_2 \) = number of control group

Results and Discussion

Based on the statistical analysis of the first hypothesis testing, it was found that the mean score of students’ writing in experimental class (72.89) was higher than the mean score of students’ writing in control class (67.21). It indicated that teaching writing by semantic mapping technique presented better result on writing skill compared to free writing. The detail information of the scores can be seen in the table below:

**Table 1. The Summary of \( t \)-test Analysis of Writing Test in Experimental and Control Class**

<table>
<thead>
<tr>
<th>Data</th>
<th>Technique</th>
<th>Semantic Mapping</th>
<th>Free Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td></td>
<td>27</td>
<td>24</td>
</tr>
<tr>
<td>( \bar{X} )</td>
<td></td>
<td>72,89</td>
<td>67,21</td>
</tr>
<tr>
<td>SD</td>
<td></td>
<td>10,05</td>
<td>11,65</td>
</tr>
<tr>
<td>( t_{\text{observed}} )</td>
<td></td>
<td>1,94</td>
<td></td>
</tr>
<tr>
<td>( t_{\text{table}} )</td>
<td></td>
<td>1,67</td>
<td></td>
</tr>
<tr>
<td>DF</td>
<td></td>
<td>27+24-2=49</td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td></td>
<td>( t_{\text{observed}} &gt; t_{\text{table}} ) ( (1,94 &gt; 1,67) )</td>
<td></td>
</tr>
</tbody>
</table>

For more details about the differences between the students’ score of experimental and control classes can be seen through the following figure:

![Figure 1 (Students’ Score in Writing)](image)

From the table 3.2 and figure 1 above, it is computed that the mean of students’ writing test in experimental class is 72.89, meanwhile the mean score of control class is 67.21. Then, \( t_{\text{observed}} \) is 1.94, which is higher than \( t_{\text{table}} \). It means that the alternative hypothesis \( (H_a) \) is accepted and the null hypothesis \( (H_0) \) is rejected. So, it shows that students who are taught by using semantic mapping technique have better writing skill than those who are taught by using free writing technique in writing.

The result of the first hypothesis showed that the mean score of experimental class which applied semantic mapping technique was higher than control class which did not apply semantic mapping technique. It can be seen from the mean score of students’ writing skill/ the mean score of students’ writing skill in the experimental class was 72.89 and in the control class was 67.21. The calculation of the data signifies that \( t \) calculated of writing skill was higher than \( t \) table 1.94> 1.67. These data indicate students’ score of writing skill in experimental class are higher than in the control class. Briefly, applying semantic mapping technique gives significant effect on students; writing skill.
Based on the statistical analysis of hypothesis testing, it was found that the students’ mean scores in experimental class is higher than those in control class. In other words, semantic mapping technique has better result on students’ writing ability of descriptive text. This findings was in line with the findings of research, which was conducted by Hasbi (2012), he found that semantic mapping technique increased students’ writing ability. The students understood of elements of writing such as organization, grammar, and vocabulary. Then, this finding is also in line with Siddig (2013) about the effectiveness of semantic mapping technique which found that semantic mapping is an effective technique in writing skill.

Moreover, Nyoni (2012) who said that semantic mapping is a graphic arrangement of words that shows how new words and ideas can be related to each other within a text. So, it can be claimed that semantic mapping is an effective diagnostic tool used by teachers to help their students who have problems with writing. The students treated in semantic mapping technique were motivated to improving their writing. This was due to the opportunity to share and explore their ideas about the topic given. As a matter of fact, semantic mapping technique encourages and prepares the students to have mental readiness before coming in to whilst writing activities through brainstorming and digging ideas to be written. They activate their schema which is related to writing materials.

In this research, semantic mapping technique that we used in experimental class provides more opportunities for students to develop their writing ability. This is in line with Harmer (2007) add that that semantic mapping or word maps are “word maps that are an extremely engaging way of building up vocabulary knowledge as well as provoking students into retrieving, displaying and using what they know”. In other words, the semantic mapping technique is a prewriting technique drawing a diagram of words using lines, boxes, arrows, circles, words and phrases to show how new words or ideas can be related to the topic.

Semantic mapping technique encourages students to share their ideas. Students write their own writing everything what they want to know about the topic. Starting from brainstorming, making a list words, writing them into diagram, then, constructing the sentences. Smalley (2001) states that the using of this technique is started with the circle in the middle of a sheet the linier paper, then drawing a line radiating out from the center it the name of a major division of the subject. It means, Semantic mapping is a way of teaching writing where students make their own word diagram that use lines, boxesm arrow, and circles to show relationship among the ideas and details. Through semantic mapping technique, the student also find out related words, ideas, concept or question as many as possible to the topic given.

Conclusions

The result of this research indicates that semantic mapping technique gives significant effect on students’ writing skill. This technique can encourage the students to express their ideas and concern on the certain interesting topic around them. It provides the same opportunity for every student to improve their writing ability. This technique helps students in overcoming students’ problem with writing skill and guides the students to express their ideas or opinion. Furthermore, the result of this research also indicates that semantic mapping technique can effectively be applied in teaching writing for students with high reading habit. The students with high reading habit who have positive attitude toward reading activity can easily adapt to a new teaching technique and they enjoy it. So, the effect of this teaching technique and the students’ who have high reading habits toward writing can effectively support the students to have better on their writing skill.

Acknowledgements

The writer would like to express the sincere gratitude to those who have given great contribution in completing this research. The deepest gratitude goes to the principal of SMP N 3 Batusangkar, English teachers, staffs, and students who have given chance, facilities, and supports in completing this research data.

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