

USING SEMANTIC MAPPING TO IMPROVE STUDENTS' READING SKILL

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Abstract: This paper aimed to know and to find out the impact of implementation of Semantic Mapping that could improve the students' reading skill. Many studies analyzed the use of Semantic Mapping in teaching reading but this article focused on the students' improvement. This research used quantitative design, mainly; the researcher used the pre-experimental research design. The obtained data of the research concentrated using the purposive sampling technique. The subjects were 28 students at the Social 4 Eleventh Graders of SMAN 1 Ngadirojo. The data had been using one group of students to be pre-tested and post-tested. The data were analyzed by calculating the normality and homogeneity on SPSS 16 version. It analyzed the result, presented the data, and marked conclusions. In prerequisite test, the result of normality was 0.598 for pre-test and 0.238 for post-test at the level of significance $\alpha = 0.05$. Whereas, in the result of homogeneity indicated that the value of chi-square observation is 0.235 while the table of the chi-square at the level of significance of $\alpha = 0.05$ was 0.630. The result of the sample t-test the t-score of this research was higher than t-table, in which the t-score was 15.612, and the t-table 2.052. It indicated that H_a (Alternative Hypothesis) was accepted. The result showed that the use of Semantic Mapping as one of the techniques to improve students' reading skill had a significance impact in teaching and learning English. In other word, it could be concluded that the use of Semantic Mapping significantly improved students' reading skill.

Keywords: Pre-experimental research, Reading Skill, Semantic Mapping.

INTRODUCTION

Indonesian students have more opportunities to read English book rather than to converse with native speaker. Therefore, it is an important aspect for Senior High School to have sufficient learning to develop their reading skill. Due to this reason, from elementary school, students were already trained to understand various kinds of English matters. Students discussed about certain aspects of what they have read and understand the purpose that will give them knowledge in Senior High School. Reading as the window of world for people in getting knowledge and information that they were not able to complete from the others skill such as listening, speaking and writing. Nuttal (1982) defined reading as the meaningful interpretation of printed or written verbal symbols. It means that reading was the result of the interaction between the perceptions of graphic symbols that represented a language, and the knowledge in the world. Hogson (on Tarigan, 2008:7) said that reading is a process that is carried out by readers to obtain messages, which will be conveyed by the writer through the media of words or written language.

Reading was a passive skill which required interactive process in understanding in order to get information or ideas from written text. Understanding the meaning of the reading skill including the ability in reading from many experts who had different points of view was definitely important for the teacher of reading. It would be useful knowledge to conduct a reading lesson in the classroom and a good reference to learn about how to deal with the reading skill more importantly. Gebhard (2006) stated that reading includes discovering meaning in print and script, within social context, through bottom-up (to comprehend written language, we rely on our ability to recognize words, phrases, and sentences) and top-down processing (as well as on our background knowledge related to the content of what we are reading), and use strategies and skill. Richards and Schmidt (2002) define reading skill as abilities required for skillful reading, such as discerning main ideas, understanding sequence, noticing specific details, making inferences, making comparisons, and making predictions in second and foreign language instruction, particularly with adults. These skills are sometimes taught separately.

Based on the definition above, the researcher concluded that reading was an active process of grasp new information which was needed by readers. It was an activity to understand the meaning of written or printed material. Therefore, teaching is appropriate thing in learning reading skill.

According to Brown (2007), suggested that teaching is building and facilitating learning, enabling the learner to learn, setting the condition for learning. It means that teacher as the builder and facilitator in managing the class become conducive. Teacher should make the classroom comfortable, so the students could enjoy in the class and focus to the lesson. According to Schlechty (in Ababio 2013) defined that teaching is an art of including students to behave in ways that are assumed to lead to learning, including to attempt to induce students to so behave. It means that teaching is way to create creativity from the teacher to students in learning process. It aimed to make students understand and enjoy the classroom activity. Based on the definition above, the researcher concluded that teaching is an action of teacher or someone who is trying to assist in ability of teaching. It could help teacher to fulfil potential in all aspects of development. On the other hand, teaching is facilitating learning in the classroom, thus teacher should be able to handle the condition in order to make students be active and enjoy in English class.

Learning English at the first time needs interesting method and technique in order to make English learning process becomes enjoyable. There were many techniques to teach reading such as by using picture, story, song, game and so on. One of techniques that can be used by the teacher is Semantic Mapping. According to Zaid (1995) defined that semantic mapping is an effective technique for teaching vocabulary and textual patterns of organization, and it is also effective for improving note taking and creative thinking skills. From the explanation, it means that semantic mapping is the new technique for teacher in teaching vocabulary creatively. Semantic mapping technique was a technique that could be used in all discipline to demonstrate the relationship between ideas. In teaching reading, it could be used as a tool for students to find the relationships between words by Gaunt (in Emor, 2011).

By using Semantic Mapping, the teacher gave something new in teaching learning process in the class and it makes students are interested in English class. The students will focus on learning reading materials and they understood the indicators of reading including the meaning of word, how to spell, the usage of words, and to pronounce by using Semantic Mapping. The use of Semantic Mapping is expected to motivate students and excited in learning English. Semantic Mapping could be beneficial technique for the students to learn English with fun and enjoy. It was considered from point of view in comprehending and the students would get constant exposure in the importance of concepts are expressed. This technique emphasizes in learning English by using the connection among words and graphic map, so the students would be easier to remember the words as they seen in the map because Semantic Mapping was a good representation technique in reading skill.

In general definition, Semantic Mapping as a conceptual relationship of picture and visual representation knowledge that can increase the vocabulary of students. According to Thuy (2010) states that Semantic Mapping has been used for: 1) general vocabulary development; 2) Pre and post reading; 3) teaching of study skill; 4) a link between reading and writing instruction; and 5) an assessment technique.

There were some previous studies related to the impact of using Semantic Mapping technique. For this chapter, the researcher only provided two of them. A study conducted by Krisnawati (2014) revealed that the use of Semantic Mapping in teaching reading comprehending was able to improve students' skill. In another research conducted by

Kumala (2013) showed that the result t-value was higher than t-table, it proved that was significant effect on reading skill through Semantic Mapping.

In other words, Semantic Mapping as the one of techniques allowed students to learn and improve more words. Based on the previous studies above, the researcher had similar technique that was Semantic Mapping and the researcher tried to use that technique to teach reading skill to the students. It can be concluded that by using Semantic mapping is also useful technique that can be introduced to students at any level proficiency. It can build the connection between teacher and students among the words in visual and conceptual framework. By using Semantic Mapping, the teacher tries to invite students to be active in class during learning reading skill. It can train students' skill to be a good of entire reading activities.

RESEARCH METHOD

A pre-experimental method focused on one group pre-test and post-test. The researcher did not use control class. In pre experimental, the research was used to compare outcomes for one group before and after involvement in pre-test and post-test. Therefore, the researcher only used experimental group for the purpose of this study. The research design can be seen as follow:

In this design, a pre-test was given before instructions or treatments begin. So, there were two tests: T_1 as the pre-test and T_2 as the post-test. X was used to symbolize the treatment of the design. For the treatment, the researcher teaches vocabulary by using semantic mapping technique. The data were calculate

In this article, the researcher uses population – single technique. The sample is taken by using purposive sampling. The researcher has only one class, which Social 4 Eleventh Graders of SMAN 1 Ngadirojo. Therefore, the population in this article is also as the sample. Normality and Homogeneity testing are applied before use sample t-test to analyze the data.

RESULT AND DISCUSSION

The result of Pre-Test and Post-Test

Before analyzing the result of the pre-test and post-test scores, the researcher checked the normality of both pre-test and post-test by using *Shapiro Wilk* method. The normality test is to check whether the data are in normal distribution or not. The data can be seen as normal data if L_o ($L_{\text{observation}}$) is higher than 0.05. The researcher found that the result of

pre-test showed that the data was normally distributed $p \geq \alpha$ ($0.598 \geq 0.05$), while the post-test score was $p \geq \alpha$ ($0.238 \geq 0.05$). Therefore, it can be concluded that both of pre-test and post-test data were in normal distribution.

After getting the normality test, the researcher analyzed the score distribution of pre-test and pos-test using Bartlett formula to find out whether the data are homogenous or not. The *Bartlett* formula test with *Chi-Square* statistical was used to calculate the homogeneity test. The researcher found that the chi-square at the level of significances $\alpha=0.05$ was 0.630. Because $p \geq \alpha$ ($0.630 \geq 0.05$), it can be concluded that the data were homogenous. To find out the t-score, it could be obtained by using formula:

$$\frac{x\sqrt{n}}{sd}$$

X : average
N : Number of samples
Sd: Standard of Derivation

$$St = \frac{x\sqrt{n}}{sd}$$

$$St = \frac{19.286\sqrt{28}}{6.537}$$

$$St = 15,612$$

To find out the t-table of the two numbers of degree of freedom, it could be obtained by using formula:

$$\begin{aligned} df &= (n - 1) \\ &= (28 - 1) \\ &= 27 \end{aligned}$$

According to the significant level 5% and the degree of freedom (df) = 27, the value of t-table = 2.052 and t-score = 15, 612. The significance of a criterion for acceptance is:

H_o is accepted and H_a is rejected if t-score < t-table

H_a is accepted and H_o is rejected if t-score > t-table

From the result, the researcher found that the t-score of this research was higher than t-table. It could be concluded that the alternative hypothesis (H_a) of this study was accepted and the null hypothesis (H_o) was rejected.

Data Interpretation

Based on the analysis of the result of the pre-test, showed that the students' reading skill still far from being expected. It could be seen from the mean score of pre-test that was still low. Thus, the fact was also supported by the result of observation that the researcher did before giving the pre-test. In observation result, most of students were not interested with the monotonous teaching English especially vocabulary. They were bored and sleepy when the teaching learning process. The students admitted that the reading activities were monotonous before conducted the Semantic Mapping technique. In addition, students need to improve in reading skill that can provide them in learning English. After the researcher taught the students by using Semantic Mapping, the score of the students' post-test increased although there were 7 students of the students who had not reached the target. The result of sample t-test also showed that t-score was higher than t-table that indicated H_a (Alternative Hypothesis) was accepted. This indicates that teaching reading skill through Semantic Mapping as the technique in improving students' reading as the good impact.

In addition to the interpretation, the researcher made based on the result of pre-test and post-test, the researcher also made some interpretations based on what the researcher encountered during the research. Firstly, the researcher found that students were enthusiastic to learn because of the use of Semantic Mapping. Secondly, the students admitted that the teaching learning process before using Semantic Mapping was bored and there was no technique to improve vocabulary. Secondly, the use of Semantic Mapping as a technique obtainment the students to improve English skill especially reading.

Furthermore, getting involvement in something new also made the students became more active in teaching learning process. They were enjoyable and enthusiastic in the activity process. Their discipline and enthusiasm during the teaching learning process made easier for the researcher manage the class. These facts indicated that using Semantic Mapping was not only improving students' reading but also their interest in learning English and doing the task.

Finally, based on the result of the interpretation, the researcher claims that the use of Semantic Mapping can interest students in learning English and improve their reading.

In addition, the use of Semantic Mapping more interesting in studying English materials and doing those activities.

CONCLUSION AND SUGGESTION

In the result of the article, the researcher carried out that Social 4 Eleventh Graders of SMAN 1 Ngadirojo shows that Semantic Mapping is one of the techniques which can help the students in learning reading skill through the tests and responds. By using Semantic Mapping as the technique, the students can improve their ability in understanding the words should be read and they are able to develop one words become another words that is still one topic. They also become active and enthusiastic in discussing the material, because the materials in Semantic Mapping are educative and varied. It is also easier for the students apply at home or their every activity when learning vocabulary, because Semantic Mapping is useful technique that can be used in various materials. Based on the result and discussion, it can also be concluded that Semantic Mapping significantly improve students' vocabulary achievement. The sample t-test result of the pre-test and post-test shows that there is a significant difference in students' vocabulary mastery. It can be seen in students' respond about Semantic Mapping that Semantic Mapping can develop ideas, sentence and new words.

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