

Mind Mapping and Brainstorming Strategies in Students' Writing with High and Low Interest

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Abstract

This research was aimed to analyze the effectiveness of Mind Mapping and Brainstorming Strategies in teaching writing hortatory exposition text to students with high and low interest. The subject of the study were the eleventh graders of SMK Kesehatan Darussalam Semarang in the academic year of 2016/2017. Two of nine classes in the school were chosen as the samples of the study. This study used experimental research design with factorial design 2x2. The researcher collected and analyzed the data by using questionnaire and writing test. The finding of this research indicates that mind mapping and brainstorming strategies are effective in teaching writing to the students with high and low interest. The result showed that the score of mind mapping strategy was higher than brainstorming strategy. It can be concluded that mind mapping strategy was more effective than brainstorming strategy and there was no interaction among the strategies, writing skill, and interest. It is hoped that the students and the teacher can use those strategies in teaching and learning process.

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INTRODUCTION

English is one of the languages which is used by people to communicate with another. Although English is not the language with the largest number of native language speakers, it becomes a lingua franca. Harmer (2001:16) defines a lingua franca as a language widely adopted for communication between two speakers whose native language are different from each other's and where one or both speakers are using it as a second language. English is used in many aspects such as economics, entertainment, law, medicine, education, and so on. However English has become the most studied foreign language today.

There are four basic skills taught in teaching and learning process of English. They are speaking, listening, reading, and writing. Writing is one of the basic skills that has to be learned by the students. Harmer (1998:79) says that "By far the most important reason for teaching writing, of course, is that it is a basic language skill, just as important as speaking, listening, and reading". It means that writing is one of basic language skills which is important to be learned by the students. Writing is a difficult skill for second language learners to master. Based on Richards & Renandya (2002:313), "the difficulty lies not only in generating and organizing ideas but also in translating these ideas into readable text." Therefore, the writers should pay attention to higher level skills of planning and organizing as well as lower level skills of spelling, punctuation, word choice, and so on.

Based on the observation, only some of them passed the minimum score (KKM = *Kriteria Ketuntasan Minimal*) for English lesson which is 70. It is because of some problems which can be divided into two. First is writing skill: (1) writing ungrammatical sentence, (2) incorrect vocabulary in a sentence, (3) incomplete content, and (4) inappropriate order of paragraph. The second is class condition: (1) unmotivated students. It means that students have low motivation in learning English. It can be seen when the teacher gave some explanation

about the material, they looked like bored and then (2) less participation during a learning process. The students were busy with their own business like playing their mobile phone or chatting with their friends.

Based on the problems above, applying the appropriate strategies in language learning becomes very needed. Those ways will lead the students to feel free to express their ideas and thoughts in written form. Teaching strategy may well stand for the plans, means and specific way especially devised and employed by the teachers for guiding, directing and showing the path to the learners for the realization of the set instructional or teaching learning objectives. Based on the background of the study above, this study attempted to address the following research problems:

1. How effective is mind mapping strategy to teach writing to the students with high interest?
2. How effective is mind mapping strategy to teach writing to the students with low interest?
3. How effective is brainstorming strategy to teach writing to the students with high interest?
4. How effective is brainstorming strategy to teach writing to the students with low interest?
5. How significant is the difference between mind mapping and brainstorming strategies to teach writing to the students with high interest?
6. How significant is the difference between mind mapping and brainstorming strategies to teach writing to the students with the low interest?
7. How are the interactions among mind mapping, brainstorming strategies and students interest to teach writing to the students?

The objectives of the study are to show the effectiveness of mind mapping strategy to teach to the students with high interest, to show the effectiveness of mind mapping strategy to teach writing to the students with low interest, to describe the effectiveness of brainstorming to

teach writing to the students with high interest, to describe the effectiveness of brainstorming to teach writing to the students with low interest, to explain the significant difference in effectiveness between mind mapping and brainstorming strategies to teach writing to the students with high, to explain the significant difference in effectiveness between mind mapping and brainstorming strategies to teach writing to the students with low interest, to explain the interactions among mind mapping, brainstorming strategies and students interest to teach writing to the students.

According to Buzan (in Riswanto and Putra, 2012:62), mind mapping is a graphic representation of ideas (usually generated via a brainstorming session). It shows the ideas which are generated around a central theme and how they are interlinked. It is a tool primarily used for stimulating thought. He realized that the education system primarily focused on the left and brain strength, which include the use of language, logic, numbers, sequence, looks at detail, linear, symbolic representation and judgemental characteristics. It is hoped that mind mapping strategy can be implemented in teaching and learning writing by the students and the teacher.

METHODS

The research design of this research uses experimental research design with a factorial design in which there is one dependent variable, two independent variables, and moderator variable. Two independent variables are mind mapping strategy and brainstorming strategy. While dependent variable is writing skill and the moderate variable is students' interest.

According to Brown (2001:94), an experiment is a process or study that result in the collection of the data. The result of experiments is not known in advance. Usually, statistical experiments are conducted in situations in which researcher can manipulate the conditions of the experiment and control the factors. The subject of the study is the students of SMK Kesehatan Darussalam, while the object of the

study is the students' writing skill. In this research, the researcher uses observation checklist, test, and questionnaire to collect the data. Observation checklist was used in order to observe the condition of teaching and learning process in the class. The test was used in order to get the data of writing. While the questionnaire was used in order to get the data about students' interest. The method of collecting data in this research, the researcher used written test. The test was used to collect data of students' writing skill and to know the students' achievement. The method of analyzing the data in this research were descriptive analysis and inferential analysis. The researchers used multifactor Analysis of Variance (ANOVA). ANOVA test was used to find out whether the difference between them was significant or not. It was calculated by using SPSS version 22.

RESULTS AND DISCUSSIONS

After dividing the class into two groups, experiment class one and experiment class two, the students did the pre-test, which was used to determine whether the writing ability of both classes was the same. The students should also answer the questionnaire in order to know their level of interest in learning English. Then, the pre-test was given to experiment class one and experiment class two. It was used to know whether their ability in writing was the same level or not. After that, the score of pre-test was calculated by using the statistical calculation in order to know the homogeneity and the normality. The data showed that the significant value of pre-test score in experimental class one was higher than 0.05 (1.000 and $0.846 > 0.05$). In experiment class two the significant value was also higher than 0.05 (0.496 and 0.140). Hence, it can be concluded that all the data was distributed normally. From the post-test, it can be seen that the significant value of experiment class one was higher than 0.05 (0.965 and $0.916 > 0.05$). In experiment class two, the significant value is also higher than 0.05 (0.998 and $0.835 > 0.05$). It means that the data was normally distributed.

The Levene statistic value of pretest was 2.746 and the significant value was 0.105. The significant value was more than 0.05 ($0.105 > 0.05$). It means that the data in the pre-test is homogeny. While in the post-test, the Levene value was 0.611, and the significant value was 0.263 ($0.263 > 0.05$). It can be concluded that the data is homogeny. From the Levene statistic value of pretest and posttest, the variance of the data showed that the characteristics were homogeny. The P-value from both pretest and posttest were > 0.05 . Therefore, it can be concluded that the variance of the classes was homogeny. Because all the data was normal and homogeneous, so the instruments were appropriate to be given to the students.

The research results revealed that the mind mapping strategy was effective to use in teaching writing to high-interest students. The results also showed the mean score of post test in the experiment class one with high interest (81.00) was higher than the pretest of the experiment class one with high interest (65.41). From the table of paired samples t-test, it can be seen that the significant value was 0.000. it was $< \alpha$ (0.05). It means that it was significantly different from using mind mapping to teach writing with a high interest in the experiment class one.

Based on the results, mind mapping strategy was also effective to use in teaching writing to students with low interest. The score of pretest in experiment class one of the students with low interest (55.26) was lower than the score of post test (71.50). It means that there was an improvement from the pretest score to posttest score. Therefore, it can be concluded that there was a significant result of using mind mapping strategy in teaching writing to low-interest students in experiment class one.

The mean of post-test of students with high-interest by using brainstorming strategy was (77.61). It was higher than that of the pre-test. The significant value was 0.000. It was $< \alpha$. It means that there was a significant result of using brainstorming strategy to teach writing to the students with high interest.

The mean score of pre-test of students with low interest by using brainstorming strategy was (55.57). It was lower than that of posttest. The significant value was less than α ($0.000 < 0.05$). It means that there was a significant result of using brainstorming strategy to teach writing to the students with low interest.

The mean score of experiment class one of the students with the high-interest (80.83) was higher than the mean score of experiment class two of students with high-interest (77.33). It means that mind mapping strategy was more effective to use in teaching writing to the students with high interest.

The mean score of experiment class one of the students with low interest (71.23) was also higher than that of experiment class two of students with low interest (69.30). It means that mind mapping strategy was more effective than brainstorming to use in teaching writing to the students with low interest.

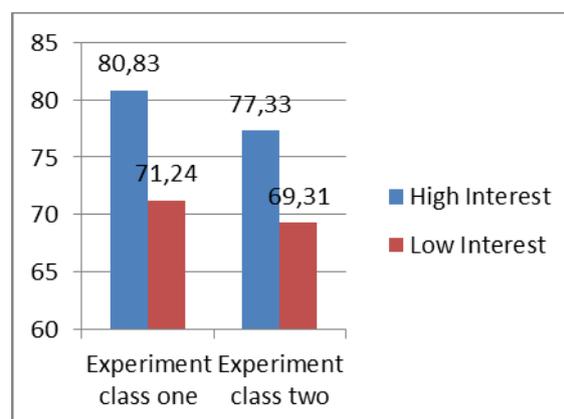


Chart 1. The Mean Score of High and Low-Interest Students in Experiment Class One and Experiment Class Two

There is no interaction among the strategies, students' interest, and writing skill. The researchers used ANOVA to analyze the result of the interaction among the strategies, students' interest, and writing skill. From the calculation, the significant value was higher than 0.05 ($0.612 > 0.05$). It means that there was no interaction among the strategies, students' interest, and writing skill. Mind mapping strategy was more effective than brainstorming strategy to both of high and low-interest

students, but it did not depend on the level of interest.

CONCLUSION

Based on the results above, some conclusions were drawn as follows:

The first result indicated that there was a significant difference in the mean score between pre-test and post-test of high-interest students taught by mind mapping strategy. We found that mind mapping strategy was effective to use in teaching writing to the students with high interest.

The second result indicated that there was a significant difference in the mean score between the pre-test of experiment class one with low interest and the post test of experiment class one with low interest. It means that mind mapping strategy was effective to use in teaching writing to the students with low interest

The third result showed that there was a significant difference in the mean score between the pre-test of experiment class two of students with high interest and that of the post-test. It means that brainstorming strategy was effective to use in teaching writing to the students with high interest.

The fourth result explained that there was a significant difference in the mean score between the pre-test of the experiment class two of students with low interest and that of the post-test. It means that the brainstorming was effective to use in teaching writing to the students with low interest.

Answering the fifth question, there was a significant difference in the effectiveness of mind mapping strategy and brainstorming strategy to teach writing to the students with high interest. It can be seen from the mean score of the students in experiment class one with high interest which was higher than that experiment

class two. It means that mind mapping was more effective than brainstorming strategy to use in teaching writing to the students with high interest.

The sixth result explained that there was a significant difference in effectiveness between mind mapping strategy and brainstorming strategy to teach writing to the students with low interest. The mean score of experiment class one of the students with low interest was higher than that of experiment class two. It means that mind mapping was also more effective than brainstorming strategy in teaching writing to the students with low interest.

The last result showed that there was no interaction among the strategies, students' interest and the writing skill. Mind mapping strategy was better for both of high and low-interest students. It means that mind mapping strategy was more effective than brainstorming strategy, but it did not depend on the level of students' interest.

From the whole results, this research proved that mind mapping strategy and brainstorming strategy can help the students in writing skill for both students with high and low interest.

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