

THE EFFECT OF MIND MAPPING ON STUDENT'S PARAGRAPH WRITING OF EIGHT-GRADE STUDENTS AT SMPN 7 TARAKAN

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ABSTRACT

This study aimed to investigate the significance of effects of mind mapping on student's writing abilities. This study employed a quasi-experimental design. The research sample consists of two classes selected through purposive sampling techniques. Data was collected using writing tests administered during pretest and posttest to measure students' writing abilities. The results indicated that the mean difference in the control class is higher than that in the experimental class. This is because the use of mind mapping is most effective when used with actively participating students. In contrast, in this study, students in the experimental class were less active during the learning process. On the other hand, in the control class, students actively played online an online game called Roblox. The Roblox game helped students expand their English vocabulary, which potentially aided their writing. From this study, it can be concluded that mind mapping is still effective in helping students improve their writing skills, although it was not maximized in this context. The results would be more significant if the students were actively engaged in the learning process.

Keywords: *Mind mapping, Paragraph writing, Students*

INTRODUCTION

Writing is considered an imperative skill for successful language development. It is because writing skill is important not only on students academic performance but also in the job opportunities (Fadillah, 2019). Hence, learning English is very important for language users right now, because by having good writing skill, it can help language users develop their academic performance and career. Deane (2018) also supported that writing is important because it is a way of exchanging knowledge, information, thoughts and opinions with other countries of the world. Meanwhile, Bora (2023) stated that good writing skill helps learners in building their analytical, rational and critical thinking skills. It show that learning writing not only help learners to express their thoughts well but also help them in enhancing their

ability to navigate a complex problem. Hence, students or language users need to more develop their writing skill, so it can give a positive impact for students or language users it self.

Teaching English has always been the challenging part for teachers. One of the teaching problems that often appear in the English class whose teacher face is teaching writing skills (Moses & Mohamad, 2019). According to Adam (2021), some challenging in teaching writing such as; teaching technique challenges, which teachers do not use appropriate technique in teaching students at classroom. It makes them difficult to get students attention in class. In teaching and learning process, teachers should use an appropriate teaching technique or method that can raise student's enthusiasm and activeness in learning process. It is because not all of the students in the class having the same intelligence and background knowledge about the lesson. It is supported by Wilson (2014) stating that students' different intelligence and background knowledge about the lesson is one of the challenges that teachers face while teaching in the classroom. The use of good teaching technique or method not only helps teachers deliver the material more effectively, but also helps students achieve an optimal learning out comes.

Writing is also know as one of the most challenging skill for English Foreign Language (EFL) students. It is because English writing skills involve not only grammar and writing procedures but also the ability to express and develop ideas for writing (Ningrum et al., 2016). Another problem that usually students find when learning writing are their lack of vocabulary and grammatical structures knowledge, spelling problem, and also paraphrasing problem (Ahmed & Sayed, 2022). Based on the preliminary research at SMPN 7 Tarakan, the researcher found that eight grade students in SMPN 7 Tarakan still had a limited vocabulary knowledge. It make them lack of enthusiasm in follow the lesson and difficulties in express their idea into a sentences. Some students also less careful in writing so that they often missed the letter or in other word students had a spelling problem.

Having the problem above mind mapping can be use as an alternative in teaching writing skill. It is because mind mapping makes students' easy to find new ideas. According to Buzan (2018), mind mapping is a diagram used to arrange words, ideas that related to the main idea. By using mind map students can easily organize their idea and after that they can make it become a good writing. Additionally, the implementation of mind could help the students to think how to write the important points, compose ideas, organize ideas, and arrange sentence to be a good paragraph (Kurniawan & Rahmawati, 2020). In mind mapping activities, students just need to find the main idea they want to write and put it in the centre of paper. After that

students start to develop the sub idea that related to their main idea. The use of mind mapping would help students not only composing their ideas or thoughts but also helping them in remember new words in a deeper way. For these reasons, the writer was interested in using mind mapping in teaching writing to the eighth graders of SMPN 7 Tarakan.

METHOD

This study was used quasi-experimental research. There were experimental and control groups. Both the groups were given a pretest and posttest to measure the differences in performance of samples for both tests according to the total of the writing test. However, only the experimental group who received the treatment used mind mapping method. The population of this research was eight graders of SMPN 7 Tarakan in academic year 2023/2024. To get the sample, the researcher used purposive sampling as a sampling technique which the sample was chosen based on the researcher's assessment of some appropriate property of the sample units. The researcher received 30 students as a sample of experimental class and 30 students as a control class.

The data were obtained by using a written test by asking the sample to write a paragraph about their personal experience. Moreover, the questionnaire also used in this research as a secondary data and an interview for the control class. Interviewing was just to find out why scores in control class got a higher increase. The data analysis for this research included scoring technique, percentages, descriptive analysis test, and hypothesis test.

FINDINGS

Table 1. Result of analysed data for Both Group (Total and the Aspect)

Variable	Mean diff. pre and post experimental	Mean diff. pre and post control	T-value and sig. between pre and post exp.	T-value and sig. between pre and post con	T-value and sig. post-test between exp. and con
Total	10.433	13.800	6.974 .000	7.985 .000	2.130 .037
Organization	2.367 23%	3.400	4.783 .000	5.429 .000	2.030 .047
Content	2.200 21%	2.700	5.430 .000	5.545 .000	1.709 .093
Grammar	1.500 14%	2.000	3.888 .001	4.693 .000	2.912 .005

Vocabulary	2.000 19%	2.900	4.447 .000	5.069 .000	1.434 .157
Mechanic	2.367 23%	2.800	5.502 .000	5.300 .000	1.529 .132

Table 1 displays the pretest and posttest results of the experimental and control classes, analyzed using paired and independent sample t-tests. From the table above showed that, the t-test score of the experimental class that analyzed using paired test was higher than the t-table score ($6.794 > 2002$) and the sig value was lower than the level of significant ($0.000 < 0.05$). Likewise, the result of t-test for the control class also showed that, the t-test score was higher than the t-table score ($7.985 > 2002$) and the sig value was lower than the level of significant ($0.000 < 0.05$). It means that, the used of learning method in both classes, experimental and control class, gave a contribution in enhancing students paragraph writing.

The average difference between the pre-test and post-test in the experimental group was 10.433, with a significant value of 0.000 ($p < 0.05$). In the control group, the mean difference between the pre-test and post-test scores was 13.800, with a significant value of 0.000 ($p < 0.05$). All facets of the variable showed considerable improvement in both the experimental and control courses.

Independent sample t-test was used to find out the significant difference effect on students' paragraph writing between students who were taught using mind mapping and those who are not. The result of independent sample t-test showed that the mean difference of posttest between the experimental and control groups was 2.130, with a significant value of 0.037 ($p < 0.05$). Therefore, it can be stated that The null hypothesis (H_0) was rejected, while the alternative hypothesis (H_a) was accepted. It means that there was a significant effect on students' writing through mind mapping of 8th graders at SMPN 7 Tarakan.

Besides, the result of the data analysis showed that the mean difference of control class was higher than in experimental class. Followed these result, the interview was conducted on one-on-one of the students in the control class. The interview result showed that most of the students in control class were actively engaged in playing an online game called Roblox. The students claimed that playing Roblox games can assist them in learning English, especially in vocabulary terms. In the Roblox games, there are a number of levels that students should pass by answering the English vocabulary appearing in the game. By doing these activities everyday, the students can improve their English knowledge.

DISCUSSION

The research result indicates that the mind-mapping method successfully enhances students' paragraph writing skills other than other method. Sudirman (2023) suggests that mind mapping might enhance students' writing skills by serving as an excellent strategy for organising and retrieving knowledge from the human brain, as Buzan (2018) stated. Utilising this strategy is both innovative and efficient for structuring our thoughts. The research findings indicate that thought mapping effectively assists students in enhancing their paragraph writing. Only two components of writing showed substantial improvement when utilising the mind-mapping method.

The most notable enhancement was in the organisation of the student's writing, where they acquired a satisfactory level of organisation in their paragraph structure. Mind mapping is helpful for students in organising their thoughts when writing (Anggrayani, 2015; Sulastri & Purnamaningsih, 2022). Additionally, based on the students' questionnaires, the majority of students concurred that utilising the mind mapping technique during the learning process facilitated the organisation and generation of keywords or ideas for their writing. Students' writing is enhanced by mind mapping, leading to improved originality, organisation, productivity, and recall (Stokhof & Vries, 2020). Furthermore, the mechanical part has shown significant growth, with most students reaching a satisfactory level. Students demonstrate proficiency in correct spelling, capitalization, and punctuation in their paragraph writing. Mind mapping is effective in helping students generate high-quality writing (Febrijanto, 2016; Lisan, 2022).

Additionally, the researcher instructed them on proper capitalization and punctuation usage in paragraph composition during the therapy phase. Students' paragraph writing became more comprehensible due to the support provided by mind mapping, as stated by Field Fadhilawati et al. (2024). This method aids students in acquiring crucial elements of writing, including vocabulary, idea development, text organisation, and mechanics. Utilising the mind mapping method improves students' paragraph writing.

On the other hand, in the control class organization and vocabulary aspects were having the highest improvement. Organization aspect had a higher enhancement where the students has achieved good category, which they were well in organized their paragraph writing. According to Lisanti et al. (2024) the used of example non example method influence students' writing skills. This method encourages students to be more imaginative and generate various ideas for their writing. The picture presented helped students easier in organized their writing idea. Besides that, during the treatment process the researcher also guided students in generate the keywords idea through picture before their started write their paragraph. It helps students described the content of their writing easier.

Furthermore, in vocabulary aspect most of the students in control class had achieved a fair category. Students were adequate in choose the appropriate word forms for their writing. Example non example method is effective in helping students produced their idea and helps them in using vocabulary or determine a new vocabulary (Aprizon & Gundary, 2019). Additionally, supported by the students who actively play online game that can increase their vocabulary knowledge, make them have an enough vocabulary list for their writing.

Moreover, the area that showed the smallest growth for both classes were grammar, with most students receiving low ratings due to numerous errors and a lack of mastery over the structural elements of recount text. It can occur because most of students didn't have a basic knowledge about grammar. Besides, the learning process of mind mapping and example non example method do not prioritise enhancing students' grammar knowledge, unlike other methods, such as the grammar-translation technique, which emphasises developing students' ability to think and comprehend how to write grammatically (Siregar, 2020). Additionally, due to time constraints, the researcher cannot fully instruct students on proper grammar in their writing, as linguistic elements such as grammar, vocabulary, language use, and sentence structure must be closely monitored when teaching English as a foreign language (Byrne,

1998). It affects kids' paragraph writing. They struggled to compose a coherent phrase for their paragraph due to their apprehension about proper grammar, particularly when employing a past tense action verb. Students who need more grammar proficiency can construct well-formed sentences in their writing, as demonstrated in the study by Alisha et al. (2019).

The control group outperformed the experimental group in terms of improvement. The mean difference score in the control group was higher than in the experimental group. The observation during the intervention revealed that students in the control group were more active than those in the experimental group. Moreover, mind-mapping will work optimally to someone who actively participate in the process of the use of mind-mapping (Warseno & Kumorojati, 2011). Another reason why the control group students got more improvement in their paragraph writing skills was because they actively engaged in playing an online game called Roblox. They claimed that playing Roblox games can assist them in learning English, particularly in terms of vocabulary. Roblox games facilitate quicker absorption of English vocabulary by visually representing each word with an appealing style. They engage in reading, writing, and listening to English phonetics within the Roblox game, as Sinar et al. (2023) described. The control group students improved their English paragraph writing more than the experimental group.

CONCLUSION

This research investigated the effectiveness of the mind-mapping technique in enhancing paragraph writing skills of the eighth graders of SMPN 7 Tarakan. The findings revealed that the used of mind mapping method was positively impacted students' paragraph writing. It was proven by the results of Independent Sample T-test and the mean score of students' writing from the experimental class were higher than control class.

The pretest result of both classes, experimental and control class showed that poor category was the highest score in all aspects of students writing. Besides that, the mean score of the experimental and control class were different before giving the treatment process. The pretest score from experimental class was 50.63 and control class was 39.27. Furthermore, following the treatment process for each class with different teaching method, it was also found that there was a significant change result of the students score in all aspect of writing. The experimental class students got two aspects of writing that showed a substantial improvement, organization and mechanic. Students who utilized mind mapping demonstrated significant improvement in organizing their thoughts and achieving a satisfactory level of paragraph structure. Additionally, their writing exhibited better mechanics, including proper spelling, capitalization, and punctuation. These findings align with previous studies highlighting the benefits of mind mapping for improved thought organization and generating high-quality writing.

Meanwhile, for the control class organization and vocabulary were the two aspects who showed a highest improvement. The used of example non example method helped students easier in express and explore their ideas and stimulate students to think more creatively, productively, and innovatively. Additionally, the picture presented in this method help students in using vocabulary. However, the research also identified a limitation. The grammar aspect

was the smallest improvement for the both classes. This can be attributed to the method not specifically targeting grammar development, unlike other methods. Additionally, lack of basic grammar knowledge and time constraints limited in depth grammar instruction.

Interestingly, the control group, who did not utilize mind mapping, displayed a higher improvement in paragraph writing. It showed that, the mean difference score in pretest and posttest of control class was higher than experimental class ($13.800 > 10.433$). This unexpected result suggests that active participation in learning activities, like playing educational online games, can also significantly benefit writing skills. Roblox, the specific game used by the control group, provided visual representations of vocabulary and opportunities for reading, writing, and listening practice, enhancing their grasp of the English language.

Following the result, the teacher should adopt, adapt, create, and develop mind mapping in teaching English language. It will help students brainstorm ideas and structure their writing effectively. They also should consider the development of students' English skill as one of the goal their teaching process by using variety teaching media, so that students can enjoy the lesson and more excite to learn. The policymakers, in this case the principal and curriculum, should introduce the mind mapping method to the teachers at school, so they can use it in the teaching and learning process that can help students understanding the materials well. They also should pay more attention toward the teachers' teaching skills by holding or supporting them into attend some seminars related to English language teaching. It can help teachers enrich their knowledge and experience in ELT.

Moreover, the school should encourage teachers to use variety learning media in learning process so that the students were motivated to learn and the learning outcomes will be achieved. For the further researcher, can follow up the same research topic through different research design, research data collection, and research participant level to achieve a better result. The further researcher also should research specific educational games to evaluate the effectiveness of particular educational online games in enhancing various writing skills like vocabulary and sentence structure and study active participation methods to identify engaging activities beyond mind mapping and online games that can stimulate active participation and enhance paragraph writing skills.

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