



THE USE OF MIND MAPPING TECHNIQUE IN INCREASING STUDENTS' WRITING SKILL ON DESCRIPTIVE TEXT THROUGH MINDOMO APPLICATION FOR SECOND GRADE OF SMAN 3 TEUPAH SELATAN

Riski Mayusandra*¹, Rosdiana² dan Syarfuni³

^{1,2,3}Universitas Bina Bangsa Getsempeña, Banda Aceh, Indonesia

* Corresponding email: halimzed003@gmail.com

ABSTRACT

This study aims to determine the use of the mind mapping technique through the mindomo application to improve students' writing comprehension focused on descriptive text in eleventh grade at SMA Negeri 3 Teupah Selatan 2023/2024 and to find out whether the use of the mind mapping technique through the mindomo application can improve students' writing comprehension of texts descriptive text in eleventh grade at SMA Negeri 3 Teupah Selatan. This class consists of 19 students. The author believes that using the mind mapping technique through the mindomo application can be chosen as one of the effective efforts used to overcome students' writing comprehension in the teaching and learning process. In this study, the writer will see whether the use of mind mapping techniques through the mindomo application can improve students' writing comprehension of descriptive texts. From the research, the authors found that there was a significant influence on student scores before and after the experiment. The results showed that the students' post-test scores increased significantly the highest compared to the pre-test. Based on the explanation above, it can be concluded that the accepted hypothesis states that the use of the mind mapping technique through the Mindomo application can increase students' scores in understanding writing descriptive text.

Keywords: *Mind Mapping Techniques, Mindomo Applications, Writing Comprehension, Descriptive text*

INTRODUCTION

According to Rosdiana (2017), Writing is an important part of thinking, and it helps us organize our thoughts and ideas in such a way that we can share and communicate our ideas to readers and convey our intentions in a clear way. Meaning Writing is a skill used to communicate ideas and thoughts indirectly, productively, and expressively. It is also a productive activity that

allows students to communicate their ideas to others. Writing is influenced by other productive skills, such as speaking and listening skills as well as aspects of reading and comprehension.

Writing is a difficult subject because students must pay attention to many things (ideas, concepts, vocabulary, and grammar). There are many text types of writing in English learning and one of them is descriptive text. Descriptive text is a text which says what a person or a thing is like. Its purpose is to describe and reveal a place and animals, or things. Rosdiana (2017) states that descriptive paragraphs are a type of paragraph that uses descriptive language to describe an object, person, or place. This type of paragraph is often dense with nouns, adjectives, and adverbs. It is understood that descriptive writing is a type of writing that is dense with nouns, adjectives, and adverbs and is designed to clearly describe the object, person, or place that is the topic of the text for the reader.

Based on the observations of researchers in class XI of SMAN 3 Teupah Selatan, shows that not all students are able to write a good descriptive texts. It is because they perceive writing as a difficult thing to do. This is caused by several cases. Most students do not have the vocabulary and also have difficulty applying in English grammar. When starting to write, the students are always stuck. Students do not have many concepts to write down about the topic different.

In addition, according to Sabbah (2015), the conventional method of mind mapping involves students drawing a square or circle in the center of a piece of paper and writing the main topic inside it. They then create nodes and jot down related words or ideas around the central topic. To expand on their main ideas as sub-ideas, students add more nodes and use various colors to distinguish them. Nevertheless, this approach has been proven to be a drain on time, resources, and energy.

Mind mapping is a technique that is generally used by people before they start writing something. According to Buzan (2002), mind maps are often built around a single word or text, placed in the center, where related ideas, words, and concepts are added. Main categories radiate from a central node, and lesser categories are sub-branches of larger branches. Its means that mind mapping technique can be applied in teaching writing in order for help the students of SMAN 3 Teupah Selatan in improving their writing skills especially in descriptive texts.

Considering that fact, the researcher suggests mind mapping as the technique for teaching descriptive text. Drawing mind mapping is an activity that makes the brain easier to accept and remember visually stimulating, multi-colored mind maps, rather than monotonous, boring linear notes. Theoretically, it can be concluded that mind mapping is a creative technique that makes it easier for students to remember ideas or comprehend written information since mind mapping stimulates students' brains by seeing multi-colored mind maps (Sugiyono & Jaenab, 2022).

The mind map technique is one of the techniques proposed by Tony Buzan with basing his research on how the brain works, by writing or noting the main topic in the middle and writing down sub-topics, and the details are placed around the main topic. Mind mapping is a technique of utilizing the whole brain by using visual images and other graphic infrastructure to form deeper impressions. Mind maps aim to create visual and graphic patterned subject matter which in turn can help record, reinforce, and recall information that has been learned.

Furthermore, the researcher found out mind mapping in the form of an application that is easy for students to use in using the mind mapping technique when writing descriptive text. The application is "Mindomo" which is specifically designed to make a mind mapping in digital form. Digital mind maps have a selection of predefined templates which can be easily accessed through the app. The digital format allows for easy and immediate visualization of ideas without the need for physical preparation. This results in a faster idea visualization process. Using a digital mind map is more efficient and accessible because it can be accessed via a smartphone. This eliminates the need for physical writing and allows users to quickly visualize new ideas. Mind map applications can assist students in speeding up the process of visualizing ideas, which is useful in situations where the teacher may ask for a quick visualization of a big idea.

According to Exswap (2016), mindomo contributes significantly to enhancing our teaching and learning abilities, as well as bolstering our performance during presentations and meetings. This versatile tool enables us to transform our ideas into vibrant mind maps, which not only promotes better comprehension for the audience but also serves as an excellent model to showcase the progression of our plans. With mindomo, we can effectively convey complex concepts and information in an engaging and organized manner, making it an invaluable asset for educators, professionals, and students alike.

In addition, Mindomo is an Android app that lets you create mind maps to express ideas visually. You start with a main idea bubble and can add subtopics, images, links and more. This app offers a wide selection of designs and fonts to make your mind map look professional and attractive. The Nice Mind app allows users to collaborate on real-time mind maps, while enhancing their skills in brainstorming, analyzing, problem solving and researching. The tool has advanced features for task management and a user-friendly interface, making it easy for anyone to collaborate and use partially filled templates to save time. This allows users to focus on important work rather than formalities.

Many studies have been conducted related to increasing students' writing skills by mind mapping technique in teaching English. First, a study by Khoriyah (2024), under the title "Increasing the Students' Writing Skill through Mind Mapping Technique". Khoriyah concluded that the students'

scores of writing test is improved after applying mind mapping technique. Students had really made significant progress. The analyses resulted in the findings that mind mapping technique could improve the students' writing skills.

Next, a study by Dwi Suci Amaniarsih and friends (2020), with the title "Improving Students' Writing Skill of Descriptive Paragraph Through Mind Mapping Method". It found that the use of mind mapping method can improve students' writing skills of descriptive text. It can be seen from the final score of the student's writing test which increased significantly. Thus, it could be concluded that the use of mind mapping method could improve students' writing skill of descriptive paragraph.

Last, a study by Rista Cahya Kusuma (2021) under the title "Improving Students' Writing Skill By Using Mind Mapping". It was found that the improvement of students' writing skill can be seen from the improvement of the students, mean score of pre-test and post-test. Therefore, it can be concluded that teaching writing by using Mind Mapping can be improve writing skill.

RESEARCH METHOD

Experimental research methods are divided into three major groups, namely pre-experimental, experimental, and quasi-experimental. Sugiyono (2014: 107), says that the experimental research method can be interpreted as a research method used to look for the effect of certain treatments on others under controlled conditions. In this study, the authors used a pre-experimental method of the one-group pretest and posttest design. Pre-experiment is a design that includes only one group or one class that is given a pre-test and post-test.

REASERACH INSTRUMEN

The population of this study is the first year's student of SMAN 3 Teupah Selatan for the academic year 2023/2024. The total population of this study is 140. Sampling of this study using purposive sampling. According to Sugiyono (2016: 85), purposive sampling is a sampling technique with certain considerations. The reason for using this purposive sampling technique is because it is suitable for use in quantitative research, where the sample is part of the population. In this study, researchers took class XI-1 because it has various characteristics. In one class there are students with various backgrounds and ability levels. Thus, this research can include a variety of writing skills that can strengthen the validity of the results. By choosing this class as a sample, the results of this study may be applied to other classes with similar characteristics. The class has 19 students.

The researcher applied two kinds of variables in doing this research. They are independent and dependent variable. The independent variable is a variable that can have an influence or influence on the dependent variable. In this study, the independent variables used were mind mapping technique through mindomo application and the dependent variable was students' writing skills. The mind mapping technique through nice mind application is said to be an independent variable because it will look at its effect on students' writing skills and students' writing skills are said to be the dependent variable because the students' writing skills achieved are the effect of the treatment of learning writing using mind mapping technique through nice mind application.

Opinion (Shiva, 2017) states that prior to the start of training, participants underwent pre-testing to calculate how much they already knew about the topics/problems or concepts discussed in this study. Pre-test is a test given before teaching begins which aims to find out to what extent students have mastered the teaching material to be taught and Post-test is an evaluation activity carried out by the teacher at the end of each presentation of the material. The aim is to determine the level of students' knowledge of the material that has been taught. Post-tests are part of the attributes or characteristics proposed to study participants after treatment (Cresswell, 2008). In this pre-test and post-test, the researcher distributed descriptive text questions. students are assigned to write questions that have been given by researchers. (based on the instructions in the questions students may ask the researcher).

TECHNIQUE OF DATA COLLECTING

To collect the data, the researcher used some tests and these tests were used to measure the student's writing skill in descriptive text by using the mind mapping technique through mindomo application. Researchers come to class and tell students what they have to do. The pretest in the researcher's writing ability asked the students to write a descriptive paragraph about person. The purpose of giving a pretest is to get initial information from students before the experiment is carried out. After giving the pre-test, the writer gave the students four treatments. The researcher applies the treatment by explaining the mind mapping technique through mindomo application that have good descriptive information. Then the material is given to students in the form of printed pictures, in other words after that students describe what they think. The students wrote in a paragraph in the form of descriptive text

The last data collection method was carried out by post-test. The post-test was given to students after being presented with the mind mapping technique through mindomo application as a treatment. Writing ability post-test, researchers do after giving treatment in experimental research. The purpose of giving a post-test in this study was to observe and measure

students' changes in writing descriptive texts. The post-test was carried out to get the students' writing scores after doing the treatment.

TECHNIQUE OF DATA ANALYSIS

Data analysis is the way data is analyzed by the researcher. In managing and analyzing the data collected, the researcher used quantitative data analysis so the researcher analyzed the data by using a formula. The analysis was used to find the significant difference in the students' writing descriptive text ability before and after used of mind mapping technique through mindomo application as a media. The test results examined and then score by using an assessment element consisting of content, organization, vocabulary, grammar, and mechanic. Destager in Dahnianti (2018) stated that there are five aspects evaluate in writing: they are content, organization, vocabulary, grammar, and mechanic. The following table presents the five aspects of evaluating which were uses.

RESULTS AND DISCUSSION

THE RESULT

The pre-test was conducted in the first meeting before the treatments were given. Meanwhile, the post-test was conducted in the last meeting after the treatments were given. After the writer conducted the two tests, the writer tabulated the score of the pre- test and the score of the post-test, then she compared both score in the form of the table. Normalized gain or N-gain score is designed to determine method or treatment effectiveness. To calculate the gain score and Mann Whitney use SPSS. The comparison between the pre-test and the post-test score can be seen in the following table:

Table 1. N-Gain Pre-test and Post-test

No	Nama	Pre-test	Post-Test	N-gain (%)
1.	S Y	43	77	76.79
2.	N P	40	78	47.46
3.	I P	41	86	56.36
4.	S A	44	78	62.50
5.	Y F	55	70	63.49
6.	R D R	45	79	59.65
7.	S R	46	77	63.33
8.	S H	47	76	76.27
9.	L M S	54	76	60.71
10.	S M	42	76	31.11
11.	F R	49	77	61.82
12.	P D L	45	79	57.41
13.	R H	44	80	54.72

No	Nama	Pre-test	Post-Test	N-gain (%)
14.	Z	44	77	47.83
15.	F N	86	90	58.62
16.	J C	44	83	54.90
17.	N A	42	76	61.82
18.	C F	45	72	64.29
19.	R A	46	78	58.93
Total		1161	1943	1426.96
Mean	N-Gain score (%)	57.06		
Minimal		26.67		
Maximal		76.79		

Based on the results of the calculation of the N-gain score test above, it shows that the average N-gain score for the experimental class is 57.06 or 57.06% which is quite effective. The minimum N-gain value is 26.67% and the highest is 76.79%. Therefore, it can be concluded that the use of mind mapping technique through mindomo application is quite effective in increasing interest in learning, especially writing text.

Mann Whitney is used as a substitute for the t test. Alpha value =5% (0.05). Before entering the hypothesis testing section, there is a decision that is used as a reference in the Mann Whitney test:

1. If the significance value or Asymp.Sig. (2-tailed) is smaller than the probability of 0.05 then the hypothesis or "Ha is accepted"
2. But if the significance value or Asymp.Sig. (2-tailed) is greater than the probability of 0.05 then the hypothesis or "Ha is rejected"

	Score
Mann-Whitney U	22.000
Wilcoxon W	347.000
Z	-5.652
Asymp.Sig	<.001

Based on the output of the "test stats" on the Mann-Whitney test above, it is known that Asymp.Sig. (2-tailed) of 0.01 is smaller than the probability value of 0.05. Therefore, as a basis for making a decision on the Mann-Whitney test above, it can be concluded that "Ha is accepted". thus, it can be said that there are differences in the results of the pre-test and post-test. because there is a significant difference, the formulation of the research problem is answered, namely "there is an effect of mind mapping technique in increasing students' writing skills on descriptive text through mindomo application".

DISCUSSION

In this section, the discussion discusses the interpretation of findings related to the use of mind mapping technique in increasing students' writing

skills on descriptive text through mindomo application for second grade students of SMAN 3 Teupah Selatan. This is indicated by the student scores on the pre-test and post-test of 19 students.

The researcher found that before being given treatment using mind mapping technique through mindomo application, the majority of students (4%) had a good enough classification. Only a small proportion are able to write well. Meanwhile, some students (96%) had poor. In addition, there were no students who were in the very good or very poor categories. Therefore, before being given treatment, the second grade students of SMAN 3 Teupah Selatan had poor ability in writing, especially descriptive text.

From the aspect of vocabulary, it can be concluded that the use of words is good, the choice of words and phrases is not quite right, and vocabulary is still low. Students often make mechanical errors in their writing. Mechanical problem related to capitalization, punctuation and spelling errors and students have problems using structures that suit their writing and coherence. Second, the assessors also concluded that the administration of the pre-test and post-test was approved by the text for middle to upper class respondents was good, schematic coherence and structure accordingly.

However, after being given treatment using mind mapping technique through mindomo application, almost all students were in the good category or had good writing skills. In addition, the percentage included in the quite very small category was only 3 students or 12%. There are no students who fall into the category of very good, less and very less. Therefore, the results of the study show that the use of animated video media can improve the descriptive writing skills of class XI students of SMAN 3 Teupah Selatan.

In other words, the use of mind mapping technique through mindomo application can improve students' writing skills, especially in descriptive text. That makes students more enthusiastic and interested in the teaching and learning process of writing. The students did not hesitate to express their ideas. Because the use of mind mapping technique through mindomo application can make students' imaginations more developed and make students more motivated to make good descriptive texts. Therefore, the results of this study also show that the use of mind mapping technique through mindomo application can improve students' writing skills, especially in descriptive text which focuses on five aspects of writing, namely content, grammar, structure, vocabulary and mechanics.

This research is supported by the theories of some experts. As stated by Tony Buzan, the developer of this learning tool, mind mapping is intentionally designed to be a creative visual learning tool that could help the students to understand the concept of the materials that they learn as things are simplified and shortened through the process of taking notes, summarizing, and organizing their ideas. Further, the benefits that were perceived by the students are the results of the efficiency of mind mapping itself as it is stated that mind mapping really has many benefits for the

students in the learning process (Al-Zyoud et al., 2017). A study by Hallen and Sangeetha (2015) shows that the mind mapping learning tool is more effective compared to the conventional method as students have more visual images that they can remember better rather than just simple lines of sentences in conventional notes.

Furthermore, the findings show that the average score in the pre-test was 46.44 and after treatment it became 77.72, so that the post-test score > pre-test. Furthermore, the increase in the average value of the students' pretest and posttest was 31.28%. Other findings from this study show that the average N-gain score for the experimental class is 57.06 or 57.06%, which is quite effective. The minimum N-gain value is 26.67% and the highest is 76.79% and the Mann-Whitney test it is known that Asymp.Sig. (2-tailed) of 0.01 is smaller than the probability value of 0.05. Based on the description above, it can be concluded that (H_0) is rejected. Otherwise, the alternative hypothesis (H_a) is accepted. In other words, the use of mind mapping technique through mindomo application can improve the ability to write descriptive texts for class XI students.

Based on the research above, the use of mind mapping technique in increasing students' writing skills on descriptive text through mindomo application has a significant effect on the teaching and learning process. The use of mind mapping technique through mindomo application is very suitable as a learning tool for English teachers using mind mapping technique through mindomo application as a method because it provides a variety of implementation materials to eliminate student boredom in learning to write, such as writing descriptive texts, narratives, essays and others.

CONCLUSION AND SUGGESTION

Conclusion

Based on the results of the research and discussion, it can be concluded that the use of using mind mapping through mindomo application can improve students' writing skills, especially in writing descriptive texts in second grade of SMAN 3 Teupah Selatan. This is evidenced by the increase in the average score of students from the pre-test to the post-test. The students' pre-test average score was 46.44 which were classified as sufficient, while the post-test score was higher than the pre-test average score of 77.72 which was categorized as a good category. In addition, based on data analysis, the n-gain score was quite effective with 57.06 or 57.06% and the Mann-Whitney test it is known that Asymp.Sigh. (2-tailed) of 0.01 is smaller than the probability value of 0.05. This means that there is a significant difference. Therefore, H_0 is rejected and H_a is accepted. In other words, the use of using mind mapping through mindomo application can improve students' descriptive writing skills.

Suggestion

Based on the research, the researcher gives some suggestions as follows:

1. It is recommended for English teachers to use mindomo application as a method because it provides variations in apply the material to release student boredom in learning writing, especially descriptive text.
2. For other researchers who want to do similar research, they are advised to apply this technique at different levels students because each school has different levels of students. Those other researchers must be creative and innovative to modify technical activities in using mind mapping technique through mindomo application to improve students writing skills.

REFERENCES

- Abdulbaset, H. M. (2016). Digital Mind Maps: Their activities in education and learning. *ELearning Journal*, 12.
- Azizah, I. (2016). Peningkatan Keterampilan Menulis Karangan Deskripsi Menggunakan Media Audio Visual Pada Siswa Kelas IV SD. *Jurnal Pendidikan Guru Sekolah Dasar*, 314.
- Bahadori, A, & Gorjian, B. (2016). The Role of Mind Mapping Soft Ware in Developing EFL Learner's Vocabulary at the Pre-Intermediate Level. *Journal of Applied Linguistics and Language Learning*, 8-16.
- Fitrianita, Dina, & Ramadhan, S. (2018). Korelasi Keterampilan Memahami Teks Deskripsi Dengan Keterampilan Menulis Teks Deskripsi Siswa Kelas Vii Smp Negeri 15 Padang. *Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 55-61.
- Sugiyono. (2014). Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D. *Bandung: Alfabeta*