

MIND-MAPPING AS A TECHNIQUE IN TEACHING WRITING DESCRIPTIVE PARAGRAPH

Ni Made Rina Puspita, Rismaya Marbun, Wardah

English Study Program of FKIP UNTAN Pontianak

Email: made822yahoo.com

Abstract: The purpose of this research is to know whether the use of mind-mapping technique is effective or not and how significant the effectiveness of the use of mind-mapping on the second grade students of SMP Kristen Kanaan Kubu Raya in academic year 2014/2015. This research was a pre-experimental study. The sample was Class VIII students. The data were collected by administering the pre-test and the post-test. Based on the data, the students' mean score of pre-test was 56.3 and the students' mean score of post-test was 76.2. Then the data were analyzed by using Effect Size (ES) formula. The research finding shows that the effect size of the treatment is 1.32 ($0.2 < ES < 0.8$). It is categorized as high. It indicates that mind-mapping is highly-effective to teach writing descriptive paragraph on class VII students.

Key words: Mind-mapping, pre-experimental study.

Abstrak: Penelitian ini bertujuan untuk mengetahui tingkat keefektifan *mind-mapping* dalam pengajaran menulis paragraph deskriptif kepada siswa kelas 8 SMP Kristen Kanaan Kubu Raya tahun ajaran 2014/2015. Penelitian ini adalah sebuah penelitian pre experimental. Sampel dalam penelitian ini adalah siswa kelas 8. Data-data diambil dengan menerapkan *pre-test* and *post-test*. Berdasarkan dari data, nilai rata-rata siswa pada pre-test adalah 56.3 dan nilai rata-rata siswa pada post-test adalah 76.2. Kemudian data dianalisis dengan menggunakan rumus ES (Effect Size). Hasil penelitian menunjukkan bahwa efek dari penggunaan *mind-mapping* adalah 1.32 ($0.2 < ES < 0.8$). Hasil ini dikategorikan memiliki efek yang tinggi. Hal ini menandakan bahwa mind-mapping sangat efektif dalam pengajaran menulis paragraf deskriptif kepada siswa kelas 8.

Kata kunci: Mind-mapping, penelitian pre-experimental.

Writing is one of productive skills in English which has a complex process. It has become an essential tool for people of all walks of life in today's community. Writing is an activity of expressing messages, ideas and information in written form. Urquhart and McIver (2005:23) state "Writing is about expressing knowledge and the students have to express their knowledge as thoughtfully and clearly as they can". Moreover, writing

needs well knowledge on sentence pattern, vocabulary, mechanic, and the way to organize idea in good written form.

Patel and Jain (2008:23) state “Writing is a skill which must be taught and practiced because writing essential features of learning a language”. It provides a very good means of fixing the vocabulary, spelling, and sentence pattern. To strengthen this statement, Khosravi & Roohani (2011:86) also define, “Writing is a basic communicative skill and a unique asset in the process of learning”. It indicates writing as a complex process. The elements in writing are not only about the sentence pattern and vocabulary, but also the process to create a good writing.

Writing is more than producing accurate and complete sentences and phrases. Ahlsen & Lundh (2007:5) also said that writing is about guiding students to produce whole pieces of communication, to link and develop information, ideas, or arguments for a particular reader or a group of readers. These statements indicate writing as an activity to show the knowledge and the pieces of information through real written form. The development of idea and the correct and the correct usage of sentence pattern cannot be separated to create good writing. As a result, writing is a unity which composed by sentence structure and the development of idea and information in written language.

Students in junior high school deal with many kinds of the paragraph. One of the paragraphs is descriptive paragraph. Descriptive paragraph is a paragraph which describes a place, something or person. Purslow (2007:4) explained that a descriptive paragraph is a group sentence that describes noun. A noun is a person, a place or a thing. Since writing descriptive paragraph included in the curricula, all of the second grade students of junior high school must accomplish it well. In fact, the students get difficulty in generating their ideas.

A paragraph is a group of sentences that convey an idea. Each sentence works together as part of a unit to create an overall thought or impression. A paragraph is the smallest unit or cluster of sentences in which one idea can be developed adequately. It can stand alone or function as part of an essay, but each paragraph covers only one main idea. Nortquist (2004:27) states that all paragraphs have a topic sentence and supporting sentences, and some paragraphs also have a concluding sentence. The topic sentence states the main idea of the paragraph. It is not only names the topic to one specific area that can be discussed completely in the space of a single paragraph. In addition, Zhemach and Islam (2005) say that a paragraph is a group of about 6-12 sentences dealing with a certain topic. Length of appearance is not a factor in determining whether a section in a paper is a paragraph. In fact, it is not the number of sentences that construct a paragraph, but the unity and coherence of ideas among those sentences.

Every paragraph has topic sentence, supporting sentences and concluding sentence. Smith and Bean (1980:45) support that the part of the topic sentence that announces the specific area to be discussed is called the

controlling idea. Supporting sentences develop the topic sentence. They explain or prove the topic sentence by giving more information about it.

Descriptive writing helps the reader to see, to hear, to smell, to feel, and/or to taste the thing that is being described. So, the writer must use sensory details such as smells, tastes, feelings, and texture to make the reader get a picture about something which is described. Moreover, James (2006) says that social function of descriptive writing is to describe a particular person, place, or thing. It means we describe the colors, shapes, sizes, weight, height, width, contents, and characteristics of something or someone in writing. Another rule is descriptive paragraphs should be detailed, clear, and render the represented reality chronologically. Writer should assume the role of readers whose idea of the described events is, in entirety, constructed by the paragraph content.

The purpose of descriptive paragraph is giving a clear picture about something, someone or certain places and the appropriate organization. Lyons and Hamp (1987:10) said that description might need to be very detailed as because a description can help the reader to visualize a scene or person to understand a sensation and emotion through his imagination.

In general a paragraph is a basic organization in writing in which a topic related sentences develop the main idea. The number of sentence is unimportant; however the paragraph should be long enough to develop the main idea clearly. It is supposed to Karim and Rachmadie (1996:50), “a paragraph is defined as a unit of information in writing which is unified by a central idea”. Similarly, Peter Carino (1991:7) states that a paragraph is a short piece of writing on a very limited topic, and although some paragraphs can stand alone, most are parts of a large piece of writing, such as an essay. As unit of sentences, paragraph is used for organizing main idea into a structured text so that the readers can get the meaning in a well formation.

Teaching is a process that improves the student's seeking level more easily and it might be overcome any situation as an easy way. Brown (2007:7) adds “Teaching is an activity to show or help someone to do something, to give the instruction, and to provide the knowledge to certain skills so it can cause the students’ understanding in learning”. It can be concluded that teaching is an activity to help the students to understand by facilitating the knowledge to their brain.

Teaching writing to students needs an appropriate technique. There are plenty ways in order to make the writing become easier. In this research the writer is interested in using mind-mapping. Mind-mapping was invented by a leading author and lecturer on learning and thinking techniques named Tony Buzan (2006). Mind-mapping helps the students in the process of absorbing information, overcoming complex problems and designing detailed plans. Therefore, this process engages much more of the brain than conventional note taking and design systems. It is supported by Steele (2004:1). He describes mind-mapping as a diagram used for linking words and ideas to a central key words. It means mind-mapping can help in constructing a written text.

Mind-mapping involves writing down a central idea and thinking up new and related ideas which radiate out from the centre. By focusing on key ideas written down in your own words, and then looking for branches out and connections between the ideas, you are mapping knowledge in a manner which will help you understand and remember new information. Having an organized display of information from the outset of the writing process may help some students, as it is more easily converted into a draft, whereas in brainstorming, the random recording of ideas might lead to problems with the structure of students' texts. As Alamsyah (2009:30) explained that mind-mapping works well as their visual design enables students to see the relationship between ideas, and encourages them to group certain ideas together as they proceed.

A study by Holland et al (2003) found mind-mapping to be a useful technique for helping students plan and structure their essays and projects more effectively. Students were able to improve the structure, coherence, and consequently, the quality of their written work and were able to draw value from the technique for project managing practical work. Moreover Al-Jarf (2009) proves that mind-mapping software offers a powerful approach for improving the ability of students to generate, visualize and organize ideas. The students involved reported that the mind-mapping tool encouraged creative thinking and they became faster at generating and organizing ideas for their writing.

The researcher uses the mind mapping because it is one of the powerful techniques for helping students develop ideas and concepts in writing. Using mind mapping, the students are likely encouraged to create as many ideas as they can. As students make mind mapping, their thoughts tumble out, enlarge their word bank for writing and often enable them to see patterns in their ideas. Steele (2004:1) describes mind-mapping as a diagram used for linking words and ideas to a central key words. It is used to visualize, classify, structure, and generates ideas. Moreover, mind mapping is ideal for English writing experience, especially prewriting activity, in which students expand and explore their ideas about the topics that are going to be written. In relation to this, Gerson (1993:84) says that mind mapping is an excellent prewriting technique because it easily allows students to gather information and develop their thought. It also helps students determine if they have omitted or included any irrelevant ideas. In short, mind mapping works well as prewriting technique since its visual design enables students to see the relationship between ideas and in expressing their ideas in the form of descriptive paragraph.

Based on the statements above, the writer assumes that teaching writing through mind-mapping can play central role in English written language for organizing ideas in writing descriptive paragraph. In making descriptive paragraph, the students can construct a paragraph from word to describe a sentence. By having this research, it was hoped that this would give positive outcomes to English teaching and learning process, particularly in writing skill practice. For this purpose, the writer used mind-

mapping as a technique in teaching writing descriptive paragraph for the second grade students of SMP Kristen Kanaan Kubu Raya.

METHOD

In order to know whether mind-mapping is effective to teach descriptive paragraph, the writer decided to conduct pre-experimental study. Furthermore, Cohen (2005:212) stated that in pre-experimental the focus of the research is only to the students in one class for the treatments. There is no other class to be compared to the class which gets the treatment. In one-group pre-test and post-test design there is no control group and the students are given some experimental instructions or treatments for a period of time. At the beginning of period of time the students have pre-test and at the end of the period have post-test. The table above shows that O1 represents pre-test while O2 represents post-test. X represents the treatment that is mind-mapping. In this research the treatment was given three times.

Marczyk (2005:18) defines, “The population is all individuals of interest to the writer”. The population for this research is the whole students at second grade students in SMP Kristen Kanaan Kubu Raya. There is only one class in this school. It consists of eighteen students.

For this research, the writer took all the population as the sample. There were eighteen students at second grade as the sample.

In this research, the writer applied the measurement technique in term of written test. Ross (2005:33) defines “measurement is a process that assigns a numerical description to the some attribute of an object, person, or event”. In other words, the writer used statistical data to present the result of student’s achievement and the effect size toward the treatment.

The tool of measurement technique in this research was written test. The test was about to make a simple descriptive paragraph. In order to analyze students’ descriptive paragraph, the writer provided item of specification as a guide to make scoring rubric.

According to the research problem which is formulated to find out the level of effectiveness of the use of mind-mapping, the writer uses the effect size formula.

$$ES = t \sqrt{\frac{1}{N}}$$

(Arikunto, 2002:280)

Tabel 1 The Criteria Of Effect Size

Effect Size	Qualification
Es < 0.2	Low
0.2 < Es < 0.8	Moderate
Es > 0.8	High

(Arikunto, 2002:280)

To compute mean score (M) for both pre-test and post-test, the writer divides the sum of the students' individual score ($\sum X$) with the number of the students (N). This following formula is applied.

$$M = \frac{\sum X}{N}$$

(Blerkom, 2009:245)

To compute the mean difference score this following formula is applied.

$$\bar{D} = \bar{X}_2 - \bar{X}_1$$

(Arikunto, 2002:207)

To analyze the effect size, the writer divides the sum of the students' significance score of pre-test and post-test. This following formula is applied.

$$T = \frac{\bar{D}}{\sqrt{\frac{\sum D^2 - \left(\frac{\sum D}{N}\right)^2}{N(N-1)}}$$

Before the writer carrying her teaching plan in classroom, the writer prepared some steps to make research activity run well. There were some preparations which were prepared by the writer: (1) Asking the permission from the headmaster of SMP Kristen Kanaan Kubu Raya to conduct a research. (2) Submitting the research recommendation from the Dean Assistant of FKIP Tanjungpura University to SMP Kristen Kanaan Kubu Raya headmaster. (3) Preparing lesson plan and material. (4) Preparing mind mapping as the technique in teaching writing descriptive paragraph. (5) Setting pre-test and post-test.

The pre test was distributed on August 12th 2014. The pre-test was done before giving the treatment in classroom. The purpose of this step was to know students prior knowledge in writing descriptive paragraph before applying the treatment.

The treatment was the application of mind mapping technique in teaching writing descriptive paragraph. It was held on August 14th 2014, August 15th 2014, and August 18th 2014. The teacher explained the generic structure and language features of descriptive paragraph first, and then taught them how to write a descriptive paragraph by using mind mapping technique.

The post-test was done after the treatment. It was held on August 20th 2014. The students were given 80 minutes to write descriptive paragraph by using mind mapping technique. The purpose of this step was

to know students' knowledge and their achievement after applying mind-mapping technique.

FINDINGS AND DISCUSSION

Findings

After conducting a research in Mind-mapping to teach writing descriptive paragraph on the second grade students of SMP Kristen Kanaan Kubu Raya in academic year 2014/2015, the writer obtained the data for the sake of research findings and hypothesis testing. To answer research question, the writer analyzed the data by computing mean score of pre-test and the result of the computation is as follows:

$$\begin{aligned}M &= \frac{\sum X}{N} \\ &= \frac{1014}{18} = 56.3\end{aligned}$$

Then the writer computes the mean score of post-test and the result of the computation is as follows:

$$\begin{aligned}M &= \frac{\sum X}{N} \\ &= \frac{1371}{18} = 76.2\end{aligned}$$

After some treatments were given to the students, there is a significant change of student's score between pre-test and post-test scores, and the significant change. The computation of the interval score can be described as follows:

$$\begin{aligned}\bar{D} &= \bar{X}_2 - \bar{X}_1 \\ &= 76.2 - 56.3 \\ &= 19.9\end{aligned}$$

To find out the significant influence of the treatment, it is important to know students' interval achievement score of pre-test and post-test. The score is calculated using *t*- test formula.

$$t = \frac{\bar{D}}{\sqrt{\frac{\sum D^2 - \left(\frac{\sum D}{N}\right)^2}{N(N-1)}}$$

$$\begin{aligned}
&= \frac{19.9}{\sqrt{\frac{10737 - \left(\frac{357}{18}\right)^2}{18(18-1)}}} \\
&= \frac{19.9}{\sqrt{\frac{10737 - 7080.5}{306}}} \\
&= \frac{19.9}{\sqrt{11.94}} \\
&= \frac{19.9}{3.45} \\
&= 5.76
\end{aligned}$$

Based on this computation result, the t- test score is higher than t-table. This significant result is at 0.1 **df (degree of freedom)**. It is proved that N-1 (18-1) is 2.110, indicates that t-obtained score 5.76 is higher than t-table 2.110.

In order to know the significant effect of the treatment, the writer will compare of $X_2 - X_1$, to determine whether the treatment has different effect on the groups. The writer is going to analyze the effect of the treatment (effect size) by using the formula as follows:

$$ES = t \sqrt{\frac{1}{N}}$$

$$ES = 5.76 \sqrt{\frac{1}{18}}$$

$$ES = 5.76\sqrt{0.055}$$

$$ES = 5.76 \times 0.23$$

$$ES = 1.32$$

Based on the result above, the effectiveness of the use of mind-mapping as a technique in teaching writing descriptive paragraph is categorized as high with $ES > 0.8$ ($1.32 > 0.8$). It means that mind-mapping as a technique gives a significance effect to improve students' achievement in writing descriptive paragraph.

Hypothesis Testing

After finding the results of the data computation analysis. It is found that the students' different score of pre test and post test is significance. It

has been proven by the students' mean score in which the students mean score of pre test is 56.3 and the students' mean score of post test is 76.2. In addition, the significant difference of the students' score that has been counted by t-test formula is 5.76. It is higher than the value in the table about 2.110 with the degree of freedom (df) N-1 (18-1=17) at the level of significance 0.05. It means the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected.

Discussion

By seeing the data analysis, the writer found the use of mind-mapping was high effectively in teaching writing descriptive paragraph for second grade students. This technique gave good effect for students' ability in writing descriptive paragraph. It was proven from the result of post test was higher than pre-test. The students' score in post test was higher after the treatment given. In addition, it was also shown from the effect size of the treatment was 1.32 and it was higher than 0.8 ($1.32 > 0.8$).

In this research, the writer administered pre-test for the students to know students prior achievement in writing descriptive paragraph before the treatment. The mean score of pre-test was 56.3. After analyzing students' pre-test, the writer found the students could not organize the sentence clearly. They tended to write in the wrong form. It became the consideration for the writer to apply mind-mapping technique in simple descriptive paragraph.

After administering pre-test, the second part was conducted as the treatment. In this meeting, the teacher gave the treatment to the students by providing a descriptive paragraph about living room. Before explaining the materials, the motivating strategy was held by asking some questions in order to know students' interest in writing. The teacher began the explanation by showing an example of descriptive paragraph firstly which consisted of identification and description. When the teacher applied mind-mapping technique in writing descriptive paragraph in front of them and explained how to work with mind-mapping, the students started to get involved in teaching learning activity and they looked more enthusiastic. They even participated when the teacher asked them to give their idea. To ensure they understood using mind-mapping technique in writing descriptive paragraph, the writer provided an exercise to write descriptive paragraph by using mind-mapping technique.

After conducting the teaching learning process by introducing descriptive paragraph and the use of mind-mapping technique to write that paragraph, the writer administered post-test to know students' achievement. The mean score of post-test was 76.2. It was higher than pre test. It showed students' achievement in post-test increased after having treatment. The students' work looked better in organizing the ideas so it was easier to be clearly understood than on pre-test. In conclusion, the score showed students' writing performance in post-test was better than pre-test.

Then, the writer analyzed the effectiveness of mind-mapping technique in teaching writing descriptive paragraph by using effect size formula. From the computation, the result of effect size was 1.32. The effect size is categorized high since effect size was higher than 0.8 ($1.32 > 0.8$), then the use of mind-mapping technique was categorized as high effectively in teaching writing descriptive paragraph for second grade students of SMP Kristen Kanaan Kubu Raya in academic year 2014/2015.

Seeing the students' achievement after using mind-mapping technique in writing descriptive paragraph, this technique is good to be used as an innovation for teaching writing. It aims to ease the students in organizing the idea. Although not all of the aspect in writing can be covered by this technique, it can be considerably used in teaching writing. This technique makes the students think easier to make their idea clearer when the teacher gave certain topic about descriptive paragraph. As a conclusion, this technique is recommended to be used for teaching writing.

CONCLUSION AND SUGGESTIONS

Based on the research findings, the writer concludes these (1) Mind-mapping technique is effective in teaching writing descriptive paragraph. The result of the students' mean score is significantly increased from the pre-test and post-test. (2) From the result of testing hypothesis, the significant score of effect size is categorized as high.

Based on the research findings and conclusions, the writer recommended these following suggestions (1) To have better result of students' performance in writing descriptive paragraph skill, the teacher can use this technique in order to train the students to have more ideas in writing a descriptive paragraph. (2) To increase the students' skill in making a topic sentence, detail information, sentence structure, and the teacher can start from each aspect as the teaching focus to build the students' understanding in writing descriptive paragraph. (3) The researchers can use this research as a reference to conduct other relevant research.

BIBLIOGRAPHY

- Arikunto, Suharmisi. (1991). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: PT. Rineka Cipta.
- (2002). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: PT. Rineka Cipta.
- (2009). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Jakarta: PT. Rineka Cipta.
- Blerkom, Malcolm. L. Van. (2009). *Measurement and Statistics for Teacher*. New York: Routledge.
- Buzan, Tony, and Barry Buzan. (2006). *The Mind Map Book*. London: BBC Worldwide Limited.

- Carino, Peter. (1991). *Basic Writing: A First Course*. United States of America: Harper Collins Publisher, Inc.
- Cohen, Louis, Manion, Lawrence & Morrison, Keith. (2005). *Research Method In Education. (5th Ed)*. New York: Taylor & Francis e Library.
- James, Peter. (2006). *English in Action*. Jakarta: Gelora Aksara Pratama.
- Karim, Mariana and Sabrony Rahmadie. (1996). *Writing*. Jakarta: Departemen Pendidikan Dan Kebudayaan Direktorat Jenderal Pendidikan Tinggi Proyek Pendidikan Tenaga Akademik.
- Lyons, B. Heasty., and Liz Hamp. (1987). *Study Writing*. New York: Cambridge University Press.
- Marczyk, Geoffrey., DeMatte, David., and Festinger, David. (2005). *Essential of Research Design and Methodology*. Canada: John Willey&Sons, Inc.
- Nothquist. (2004). *English Writing Styles, Paragraph and Essay Writing Skills*. An Article www.englishteachingforum.com [accessed: 30 August 2014]
- Purslow, France. (2007). *Learning to Write: Descriptive Paragraphs*. New York: Weigl Publisher, Inc.
- Smith, C.C., & Bean, T.W. (1980). *The Guided Writing Procedure: Integrating Content Reading and Writing Improvement*. Reading World, 19,290-294.
- Steele, Vanesha. (2004). *Using Mind Mapps to Develop Writing(online)* (<http://www.teachingEnglish.org.uk/think/article/using-mind-mapsdevelop-writing>, diakses 22 Januari 2012).
- Urquhart, Vicky and McIver, Monette. (2005). *Teaching Writing in the Content Areas*. USA: McREL.
- Zhemach, Derothy E., Carlos Islam. (2005). *Paragraph Writing From Sentence to Paragraph*. Oxford: Macmillan.

