

**THE INFLUENCE OF USING MIND MAPPING TECHNIQUE TO IMPROVE
WRITING SKILL IN DESCRIPTIVE TEXT AT JUNIOR HIGH SCHOOL
(META-ANALYSIS)**

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ABSTRAK :

Penelitian ini bertujuan untuk menganalisis pengaruh teknik mind mapping terhadap hasil belajar keterampilan menulis teks deskriptif siswa SMP. Metode yang digunakan dalam penelitian ini adalah meta-analisis. Langkah pertama peneliti merumuskan masalah kemudian melanjutkan pengumpulan data penelitian melalui pencarian google scholar. Dari hasil pencarian diperoleh 6 artikel dari jurnal dan 4 skripsi yang relevan. Data yang diperoleh diolah kembali dengan menggunakan metode kuantitatif. Berdasarkan hasil analisis, teknik mind mapping efektif untuk meningkatkan hasil belajar keterampilan menulis teks deskriptif siswa SMP. Skor sebelum dan sesudah pembelajaran menggunakan teknik mind mapping menyajikan skor perbedaan yang signifikan dari yang terendah 8,03% hingga tertinggi 67,68% dengan peningkatan rata-rata 27,36%.

Kata Kunci: *mind mapping, meta analisis, descriptive text*

ABSTRACT :

This study is aimed to analyze the influence of mind mapping technique on learning outcomes of writing skills in descriptive text of Junior High Schoolstudents. The method used in this research was meta-analysis. The first step, researcher formulated the problem and then continue the collecting research data through google scholar search. From the search results, it is obtained 6 articles from journals and 4 relevant theses. The data obtained is reprocessed using quantitative methods. Based on the analysis results, Mind mapping technique is effective to improve learning outcomes in writing skills in descriptive text of Junior High

Schoolstudents. Score of before and after learning using mind mapping technique presented significant difference score from the lowest 8.03% to the highest 67.68% with an average increase of 27.36%.

Keywords: *mind mapping, meta-analysis, descriptive text*

INTRODUCTION

The most important and useful language in developing countries is English, because it is the first international language (Saputri, 2017). English has been formally studied in Indonesia from primary school to high level (university). English is one of the compulsory subject for all schools in Indonesia, and they must have four English language skills. The four skills are listening, speaking, reading, and writing. Each language skill is very related to one another.

One in all the skills that have an important role in English language teaching is writing (Aziz & Magdalena, 2016). It is useful to be learnt by students to develop their skills in expressing their ideas and establishing or maintaining social relationships in communicating with others. In different words, writing ability is one of the most important parts of communication because writing is a tool to convey ideas, messages, feelings in written form.

According to Hidayah (2014, p. 2), writing is a way or media that can be used to communicate and interact between writers and readers. Writing is a process for conveying complicated meanings and requires coordination of various metacognitive skills (Maskor & Baharudin, 2016). Furthermore, Octavia (2018, p. 1) stated that writing is a method of how people convey information or how to express their idea and feeling, and turn it into writing through the process of thinking. Therefore, writing is a way to convey information or ideas as well as to communicate and interact with the media in the form of writing through the process of thinking.

Heaton (Cited in Puspa Gundaya 2018, p. 58) stated that writing is more complex and difficult to teach, understand, and not only grammar and rhetoric but also in concepts and judgments. Writing is not a convenient activity but an activity where the process of thinking, discipline and careful concentration is necessary. Researcher has also described writing as a complex cognitive task (Grami, 2010). Therefore, writing skills are difficult to learn and teach.

One of the factors underlying the difficulties in learning to write is the lack of motivation for students to learn in class. It is caused by learning so monotonous that children get bored easily and are less interested in exploring the material. According to Hergenbahn dan Olson, there are two factors that influence learning success, namely internal factors and external factors (Yuzarion, 2017). Monotonous learning conditions are external factors

that can affect student learning outcomes. It has been experienced by the researchers at pre-observation time at MTs Nurul Khair Surabaya. It appears that the teacher still used the lecture method and without using any media, so the students were not interested in paying attention to the teacher.

In 2013 curriculum (2017), Subject of English for SMP / MTs are aimed at developing the potential of students to have communicative competence in, transactional, interpersonal and functional texts, using a variety of spoken and written English texts. The text is in the form of descriptive, recount, narrative, procedure, and information report at the level of functional literacy. Descriptive is the first material of writing skill in junior high school.

Kane (2000, p. 351) stated that descriptive text is a text that describes experiences related to the senses, such as what its shape, sound, and feeling. Most of the descriptive text is about visual experience, but in reality, besides the experience of sense of sight, it can also be used in descriptive text. Gerot and Wignell in Maisitoh and Suprijadi (2015, p. 40) also define descriptive text is a text that shows characteristics or explains a place, certain person thing. According to Jufri (2016:64 as cited in Sirait and Marlina 2018) states that descriptive text is text that describes a characteristic of person, location or something. This text is very helpful to explain certain characteristics of a person / thing. Siburia (2013) said that paragraph is a set of words that have a purpose to define or explain the characteristics of life or living objects such as humans, objects, places, animals or others either only visible from the outward appearance or in terms of action. From the explanation above, it can be deduced that descriptive text is a text used to describe the characteristics of person, places, animals, and certain things that can be explained clearly to inform the reader to feel directly or as if the reader in the story so that what is conveyed can be understood easily.

The learning model has an important role in learning process because with an appropriate learning model will make students enjoy the learning process and can receive learning materials properly. A good and appropriate learning model will lead to the achievement of the learning objectives themselves. By choosing a learning model that suits students' abilities, the material being taught and the conditions of the school will certainly create a good learning process. One of the learning models to overcome students' difficulties in writing skills is to apply the mind mapping technique learning model because it is an active, creative and enjoyable activity. By using it, students can develop their minds and also make creative students in finding ideas (Khusniyah, 2019).

Buzan stated that Mind mapping is an effort to develop thinking activities from someone from one direction to being in any direction, and can take various kinds of thoughts into various points of view (Cahyo, 2013). Mind

mapping can also be used to develop divergent and creative ways of thinking. With this technique, students will easily pour out the ideas and experiences that they have into the stories they want to make. Besides, mind mapping technique is a tool that can assist the brain think regularly and is able to map thoughts in the form of real symbols. It enables students to compile the main ideas and thoughts about the stories written.

Mind mapping can be called the pre writing technique, because it is the first technique before starting an essay or writing. It is very beneficial for students who are still learning about the basic structure in language. Problems of less ideas and vocabulary can be overcome by using this technique. Therefore, through brainstorming and mind mapping sessions, composition writing can come alive.

In this study, researcher focuses on several studies that have been conducted on the application of mind mapping techniques in the learning process on learning outcomes of students' descriptive text writing skills in junior high school by using meta-analysis research. This can be seen from the results after using it in the learning process. The purpose of this study was to determine how much influence the use of mind mapping technology on learning. The results of this meta-analysis are expected to provide a uniform view of the findings as a whole and as an additional source or information about the use of mind mapping technique to improve learning outcomes of students' in learning writing skill descriptive text and show that mind mapping technique are appropriate to be applied in junior high school in learning process writing skill especially in descriptive text.

METHOD

The type of research used is meta analysis. Meta-Analysis is one technique used to summarize the findings of two or more studies with the aim of combining, reviewing and summarizing previous research (Anugraheni, 2018). Besides that, meta-analysis is not subjective compared to other methods, but rather focuses on data. Research data collection techniques are done through Google search, Google Scholar and repositories. The keywords used in search are "Mind Mapping Technique", "Writing skill" and "Descriptive text". Based on the search results obtained, there were several relevant articles from various online scientific journals and thesis results in the repository. The criteria for selecting research (Meline, 2006) are as follows: (1) Included studies must have about using mind mapping technique in learning writing skill at Junior High School especially descriptive text; (2) Included studies must have been published in the last 10 years; (3) The study used a quantitative; (4) The

results of the data obtained can indicate a significant difference between before and after using mind mapping technique. The exclusion criteria of this study are: (1) The format article was wrong; (2) The study was published in more than 10 years. The search results found more than 25 research journals, only 10 journals that match the inclusion and exclusion criteria. From the articles and the results of the thesis, the researcher chooses 6 articles and 4 of the most relevant theses.

The steps for analyzing data in this study are: (1) Putting the data in a table, (2) Analyzing data on average learning outcomes before and after using mind mapping learning model; (3) Processing the data by using SPSS version 20 for windows; (4) Describing the analyzing data by looking at the effect of using mind mapping on student learning outcomes.

RESULT AND DISCUSSION

Result

From the results of data processing of 10 articles, it is obtained that there is an influence of the use of mind mapping models to the learning outcomes of writing description text skills at the junior high school level. The use of mind mapping techniques has a positive effect with an average percentage of student learning outcomes of 27.36%. The data was obtained from 10 sample articles and then the data was rounded up and processed using SPSS version 20 for windows.

The results of previous studies used in this meta-analysis study are as follows: 1) The use of mind mapping technique in writing descriptive text by Nurlaila (2013), 2) The effectiveness of using mind mapping technique on students' writing skill in descriptive text by Rahmah (2017), 3) Improving descriptive writing ability through mind mapping by Nurul Lailatul Khusniyah (2019), 4) Improving students' ability in writing descriptive texts by using mind mapping technique at the second year of Mts ykwi Pekanbaru by Rahmawati (2011), 5) Improving the eighth grade students' ability in writing simple descriptive paragraph through mind mapping technique by Hidayah et al. (2014), 6) The use of mind mapping picture to improve students' writing skill of descriptive text at grade VIII of SMP s Johan Sentosa by Sukma and Gusparia (2018), 7) Implementation of mind mapping learning model to improve english learning outcomes in simple descriptive texts by Junaedy (2018), 8) Mind Mapping on Students' Writing Descriptive Text by Panggabean, Lubis, and Lubis (2019), 9) The effectiveness of mind mapping

technique in learning writing descriptive text by Azkiya (2016), 10) Applying the mind mapping technique to improve students' writing skill of descriptive text by Fadhilah (2015).

This data is processed by taking only the core data, then the results of the data that has been obtained, calculated qualitatively and quantitatively. Then the analysis results of mind mapping technique learning model is analyzed using the Paired Samples T Test which can be seen in the table below.

Table 1. Percentage of Increase in Learning Outcomes writing skills

No	Topic	Author	Improved Learning Outcomes			
			Before	After	Gain	Gain(%)
1	Mind Mapping Technique, Writing Descriptive Text	Alma Prima Nurlaila	45,83	58,53	12,7	27,71
2	Mind Mapping Technique, Students' Writing	Ulia Rahmah	63,62	68,73	5,11	8,03
3	Improving Descriptive Writing, Mind Mapping	Nurul Lailatul Khusniyah	68,18	81,44	13,26	19,45
4	Improving Students' Ability in Writing, Mind Map Technique	Fadilah Rahmawati	47,1	62,17	15,07	32,00
5	Improving Students' Writing Simple Descriptive Paragraph, Mind Mapping Technique	Nurul Hidayah, SriatiUsman, Abdul Waris	51,7	73,5	21,8	42,17
6	Mind Mapping Picture, Students' Writing Skill	Debi Eka Sukma, Gusparia	60,38	77,5	17,12	28,35
7	Mind Mapping Learning Model, English Learning Outcomes in Simple Descriptive Texts	Junaedy	73,35	90,3	16,95	23,11
8	Mind Mapping, Students' Writing Descriptive Text	Wulan Sari, Panggabean, Fitriadi Lubis, Rayendriani Fahmei Lubis	52,87	71,17	18,3	34,61

Advanced from table 1

9	Mind Mapping Technique, Learning Writing Descriptive Text	Utul Azkiya	62,84	68	5,16	8,21
10	Mind Mapping Technique, Students' Writing Skill of Descriptive Text	Yusri Nur Fadhilah	45,64	76,53	30,89	67,68
Mean of the effect of mind mapping technique			57,15	72,79	15,64	27,36

At this stage, combining 10 sample articles is used as a basis for this research. The data presented in Table 1 includes the average before and after the use of mind mapping, gain and gain% in each study.

Table 2. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	57,1510	10	9,87937	3,12413
	Post-test	72,7870	10	9,28728	2,93690

In table 2. Paired Samples Statistics show that the average learning outcomes before and after using mind mapping techniques can increase. This study also explains the amount of the influence before and after the use of mind mapping technique that has been presented in table 3.

Table 3. Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre-test & post-test	10	,689	,028

After evaluating the correlation using SPSS 20 for windows, the test results are in table 3. Paired Samples Correlations shows the correlation between the two variables, namely the influence of the use of mind mapping techniques and learning outcomes of writing skill in descriptive text.

Table 4. Paired Samples Test

		Paired Differences				t	Df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	pretest – post-test	-15,63600	7,57800	2,39637	-21,05697	-10,21503	-6,525	9 ,000	

Here are the results of the analysis of the hypothesis test in table 4. Paired Samples Test which states that H_0 = there is no significant influence of using mind mapping technique on student learning outcome. and H_1 = there is a significant influence of using mind mapping technique on student learning outcome. From table 4 above. it can be seen that the value of Sig. (2-tailed) (0,000) $< \alpha$ (0.05) and Table 4 shows that the value of $t_{count} = -6,525 < t_{table} = 2,306$, then H_0 is rejected. So it can be concluded that there is a significant influence of using mind mapping technique on student learning outcomes before and after using mind mapping technique.

Discussion

From the review of the results of the study, in general some data are obtained that the effect of the use of mind mapping technique on the learning outcomes of writing skill in descriptive text at Junior High School have a positive impact. From 10 sample articles, it shows the effect of using mind mapping. The results in Table 1 show that each of the previous studies showed an increase in average learning outcomes after giving a mind mapping technique with the lowest% gain of 8.03% to the highest of 67.68% with a final average of 27, 36%. Meanwhile, if seen from the average learning outcomes before and after using mind mapping technique, table 2 shows that the average learning outcomes before and after using mind mapping techniques can increase. Before applying mind mapping technique, the average student learning outcomes from the data of 10 article samples was 57.1510, while the average number of learning outcomes after applying mind mapping technique was 72.7870.

The relationship between the 2 variables in table 3 also shows a correlation with a value of 0.689 with a sig of 0.028. This shows that the correlation between the two averages before and after using mind mapping technique is strong and significant. The results of data analysis about the effectiveness of using mind mapping techniques to improve student learning outcomes, it can be concluded that writing skill of descriptive text uses mind mapping technique is effective in learning activities. Students' learning

outcomes will improve when the students using mind mapping technique. It appears from the average value before and after using mind mapping technique which the percentages increase from lowest to highest. In table 1, 10 research samples that have been carried out previously have unequal end results, eventhough each study shows an improvement between the conditions before and after the use of mind mapping technique.

This is a common thing, because the condition of students will not be the same between one another. In addition, factors from inside and outside the student itself are also very influential on student learning outcomes, for example when taking a test the student's condition is unstable or it could be that the student's health condition is not good. In addition factors from outside students are also very influential, for example from the school environment, school conditions, the location of schools that are too close to the highway, and other factors that can cause a lack of interest and concentration in student learning.

CONCLUSION AND SUGGESTION

Based on the results of research and discussion, it can be concluded that the final results of this study can answer the researcher's problems as they have been formulated in the formulation of the problem. The use of mind mapping technique has an influence on student learning outcomes in writing descriptive text material in junior high school. This is reviewed from the data after applying mind mapping technique, student learning outcomes are high with an average result of 10 samples is 72.79 from the previous 57.15. From these data there was a significant increase of 15.64 or the ratio of student learning outcomes rose to 27.36%. This means that applying of mind mapping technique has a positive effect on learning outcomes of students' writing skills in descriptive text. Suggestions to researcher who will conduct a similar study to be able to increase the number of samples studied, so that the results of the study can be used as a comparison material as well as additional information about the effect of using mind mapping technique to the learning outcomes of students writing skills in descriptive text. besides, with the amount of data used, more objective data will be obtained and provide a clearer description.

REFERENCES

- Anugraheni, I. (2018). Meta Analisis Model Pembelajaran Problem Based Learning dalam Meningkatkan Keterampilan Berpikir Kritis di Sekolah Dasar *Journal of Language, Literature, Culture, and Education*, 14, 12.
- Aziz, Z. A., & Magdalena, N. (2016). Using a Dialogue Journal to Develop Writing Skills. *English Education Journal*, 4.

- Azkiya, U. (2016). *The Effectiveness of Ming Mapping Technique in Learning Writing Descriptive Text*. Syarif Hidayatullah State Islamic University, Jakarta.
- Cahyo, F. N. (2013). *Using the Mind Mapping Technique to Improve the English Writing Skill of the Tenth Grade Students at Man Yogyakarta III in the Academic Year of 2012/2013*. State University of Yogyakarta, Yogyakarta.
- Fadhilah, Y. N. (2015). *Applying the Mind Mapping Technique to Improve Students' Writing Skill of Descriptive Text* Syarif Hidayatullah State Islamic University, Jakarta.
- Grami, G. M. A. (2010). *The Effects of Integrating Peer Feedback into University-Level ESL Writing Curriculum: A Comparative Study in a Saudi Context*. Newcastle University, (9)
- Gunday, P. (2018). *Shared Writing Strategy Implementation to Improve Short Essay Writing Skill of Students at Level 3 Language Development Center in UIN Suska Riau*. *Al-Ishlah: Jurnal Pendidikan*, 10, 58.
- Hidayah, N., Usman, S., & Waris, A. (2014). Improving the Eighth Grade Students' Ability in Writing Simple Descriptive Paragraph through Mind Mapping Technique *e-Journal of English Language Teaching Society (ELTS)*, 2, 2.
- Junaedy. (2018). Implementation of Mind Mapping Learning Model to Improve English Learning Outcomes in Simple Descriptive Texts. *Journal of English Language, Literature, and Teaching*, 3.
- Kane, T. S. (2000). *The Oxford Essential Guide to Writing*. New York: Oxford University Press.
- Kebudayaan, K. P. D. (2017). *Model Silabus Mata Pelajaran Sekolah Menengah Pertama/Madrasah Tsanawiyah (Smp/Mts)*. Jakarta: Tut Wuri Handayani.
- Khusniyah, N. L. (2019). Improving Descriptive Writing Ability Through Mind Mapping. *Research and Innovation in Language Learning*, 2.
- Masitoh, S., & Suprijadi, D. (2015). Improving Students' Ability in Writing Descriptive Text Using Genre Based Approach (Gba) at The Eighth Grade Students of SMP Islam Terpadu Fitrah Insani. *ELTIN Journal*, 3, 40.
- Maskor, Z. m., & Baharudin, H. (2016). Receptive Vocabulary Knowledge or Productive Vocabulary Knowledge in Writing Skill, Which One

- Important? *International Journal of Academic Research in Business and Social Sciences*, 6, 265.
- Meline, T. (2006). Selecting Studies for Systematic Review: Inclusion and Exclusion Criteria *Contemporary Issues in Communication Science and Disorders*, 33.
- Nurlaila, A. P. (2013). The Use of Mind Mapping Technique in Writing Descriptive Text *Journal of English and Education*, 1.
- Octavia, A. (2018). *The Influence of Using Facebook Profile towards Students' Writing Ability in Descriptive Text at the First Semester of the Eighth Grade at Smp Negeri 8 Pesawaran in the Academic Year of 2018/2019* Raden Intan State Islamic University of Lampung, Lampung.
- Panggabean, W. S., Lubis, F., & Lubis, R. F. (2019). Mind Mapping on Students' Writing Descriptive Text *English Journal for Teaching and Learning*, 7.
- Rahmah, U. (2017). *The Effectiveness of Using Mind Mapping Technique on Students' Writing Skill in Descriptive Text* Syarif Hidayatullah State Islamic University, Jakarta.
- Rahmawati, F. (2011). *Improving Students' Ability in Writing Descriptive Texts By Using Mind Map Technique at The Second Year of Mts Ykwi Pekanbaru*. State Islamic University of Sultan Syarif Kasim Riau, Pekanbaru.
- Saputri, T. (2017). Improving Vocabulary Mastery Through Flashcards in Sartika Kindergarten Surabaya. *Atlantis Press*, 145.
- Siburian, D. T. A. (2013). Improving Students' Achievement on Writing Descriptive Text through Think Pair Share. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)*, 3.
- Sirait, J. B., & Marlina, L. (2018). Using Instagram as a Tool for Online Peer-Review Activity in Writing Descriptive Text for Senior High School Students. *Journal of English Language Teaching*, 7.
- Sukma, D. E., & Gusparia. (2018). The Use of Mind Mapping Picture to Improve Students' Writing Skill of Descriptive Text at Grade VIII of Smp S Johan Sentosa *Jurnal Pendidikan Al-Ishlah*, 10.
- Yuzarion. (2017). Faktor Yang Mempengaruhi Prestasi Belajar Peserta Didik *Jurnal Ilmu Pendidikan*, 2.