



IMPLEMENTATION OF MIND MAPPING IN IMPROVING SIXTH-GRADE STUDENTS' DESCRIPTIVE WRITING ABILITY AT SDN BLIMBING 2 MALANG

Mochammad Amirudin Ichda¹, Shirly Rizki Kusumaningrum², Radeni Sukma Indra Dewi³

^{1,2,3} Universitas Negeri Malang, Indonesia

¹alichda@gmail.com, ²shirly.rizki.pasca@um.ac.id, ³radenisukmaindradewi.pasca@um.ac.id

PENERAPAN *MIND MAPPING* DALAM PENINGKATAN KEMAMPUAN MENULIS DESKRIPSI SISWA KELAS VI DI SD NEGERI BLIMBING 2 MALANG

ARTICLE HISTORY

Submitted:
20 Oktober 2022
20th October 2022

Accepted:
10 Desember 2022
10th December 2022

Published:
16 Desember 2022
16th December 2022

ABSTRACT

Abstract: This article analyzes the influence of mind mapping in improving sixth-grade elementary school students' descriptive writing ability. The type of research is qualitative research with a problem-solving research design. Problem-solving is an approach that indicates the data in the form of words or statements obtained through interviews, documentation, observations, and so on. Classroom action research is conducted to solve problems in learning in the classroom or to improve learning quality. The research subjects involved 24 students of class VI at SDN Blimbing 2. The test results before implementing the class research action indicate that the average value is 54. In cycle I, the average value is 68.7 with a completeness percentage of 42%. It shows that between the pretest and cycle 1 there is an increasing value of 14.7. In cycle 2, the average value increases to 75.2 with a completeness percentage of 100%. The observation results of students' activity in cycle 1 achieve 71% while in cycle 2 it achieves 81%, which means that there is an increasing percentage of 10%. The observation results teacher's teaching management in cycle 1 achieves a percentage of 73% and in cycle 2 it achieves a percentage of 87%, which means that there is an increasing percentage of 15%. Thus, the data analysis of students' writing descriptive essays through mind mapping from the pretest, cycle 1 to cycle 2 has achieved an average score target.

Keywords: mind mapping, descriptive essay, writing ability

Abstrak: Artikel ini menganalisis pengaruh *mind mapping* dalam peningkatan kemampuan menulis deskriptif siswa kelas VI SD. Jenis penelitian adalah kualitatif dengan desain penelitian *problem solving*. Pendekatan *problem solving* adalah pendekatan yang datanya berupa kata-kata atau pernyataan yang diperoleh melalui wawancara, dokumen, observasi, dan lain-lain. Penelitian tindakan kelas dilaksanakan dengan tujuan untuk memecahkan permasalahan dalam pembelajaran di dalam kelas atau untuk meningkatkan kualitas pembelajaran. Subjek penelitian melibatkan 24 siswa kelas VI di SDN Blimbing 2. Hasil tes sebelum tindakan penelitian kelas menunjukkan bahwa nilai rata-rata kelas sebesar 54. Hasil pada siklus I, nilai rata-rata kelas menjadi 68,7 dengan persentase ketuntasan 42%. Hal ini menunjukkan bahwa antara pra tes dan siklus 1 terjadi peningkatan sebesar 14,7. Pada siklus 2 nilai rata-rata kelas meningkat menjadi 75,2 dengan persentase ketuntasan 100%. Hasil observasi aktifitas siswa pada siklus 1 mencapai 71% sedangkan pada siklus 2 mencapai 81%, yang artinya terjadi peningkatan sebesar 10 %. Hasil observasi pengelolaan pembelajaran guru pada siklus 1 mencapai persentase 73% dan pada siklus 2 mencapai persentase 87%, yang artinya terjadi peningkatan 15%. Dari hasil analisis data tes menulis karangan deskripsi menggunakan *mind mapping* dari pra tes, hasil tindakan siklus 1 ke siklus 2 sudah memenuhi target yang telah ditetapkan.

Kata Kunci: mind mapping, karangan deskriptif, kemampuan menulis

CITATION

Ichda, M, A., Kusumaningrum, S, R., & Dewi, R, S I. (2022). Implementation Of Mind Mapping In Improving Sixth-Grade Students' Descriptive Writing Ability At Sdn Blimbing 2 Malang. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, 11 (6), 1805-1816. DOI: <http://dx.doi.org/10.33578/jpfkip.v11i6.9299>.

INTRODUCTION

In the era of globalization, writing skills are needed. Many jobs require someone skilled at writing, for example, journalists, editors, authors, and all professions related to writing. This writing ability does not come automatically, but must go through practice and practice. Writing activity is one of the most recent manifestations of language skills mastered by language learners after listening, reading, and speaking (Lubis, 2021). In the same book, I also explained that when compared to other language skills, writing skills are more difficult for language learners to master because writing skills require mastery of various other aspects besides language to produce coherent or coherent paragraphs or discourse.

They divided language skills into two parts, written language and spoken language. Written language tests whose component is reading skills are a basic skill taught in early elementary school classes (Rohmat, 2018). Writing is a complex activity because writers are required to collect the contents of letters, classify them and implement them in several books. However, only a few students like to write. Meanwhile, writing skills are the ability to identify the thoughts and feelings that are most important to other parties using written language (Rohmat, 2018).

This writing activity requires the writer to know how to use graphology, language structure, and vocabulary. This writing skill does not come by itself but must go through a lot of practice and regular practice (Apriyanti, 2020). Writing is one of the compulsory subjects in schools that are included in the curriculum and includes writing descriptive texts. Therefore, writing skills, especially writing descriptions, must be learned and mastered. Descriptive text is a sentence that describes an object in detail and using our senses (Fauzi, 2018).

A descriptive essay is a type of written communication that describes or describes the object in detail or depth, depending on the actual situation of the thing being described. Everything we hear, smell, see, and feel is expressed through the senses and explained through the medium of words so that others can understand it. The purpose of this essay is to achieve an imaginative enough assessment so that the listener or reader feels they have experienced and know themselves firsthand.

The purpose of this descriptive writing skill is for students to be able to express their thoughts, opinions, and experiences through creative writing. In conjunction with improving writing skills, it must develop writing skills. High creativity also generates better ideas, e.g. the higher the creativity, the better the results of writing descriptive essays. Thanks to creative thinking, one can develop ideas and imagination in descriptive essays (Sidabutar, 2021).

Based on the researcher's observations, there are several causes for the low writing skills of students, especially in descriptive essays. These factors are (1) less familiarity with writing activities creates new problems, in other words, students feel burdened when given writing assignments. (2) most students need quite a long time to be able to express their ideas and ideas if they are to be able to describe in words the description of an object. (3) The percentage of time given to students is minimal, so students do writing assignments only to fulfill the teacher's assignments. (4) students have not been able to express ideas well. (5) Some students are not used to using written media as a means of expressing their thoughts and ideas, so students are not familiar with language development; (7) less potential to use. Based on the existing problems, teachers and researchers argue that learning strategies for writing descriptive essays, especially the strategies or methods teachers use, need to be improved. In this case, the



teacher and researcher agreed to use a mind map strategy.

THEORETICAL SUPPORT

This literature review contains descriptions of theories, relevant research, and frame of mind. The description of the theory contains theories related to the research topic, namely writing ability, descriptive essays, and mind mapping.

Writing Ability

According to Dalman (Andriyani et al., 2021) writing is conducting correspondence through the delivery of messages (information) delivered in writing to various meetings using language that is regulated as an instrument or medium. Writing is degrading, imitating or representing a graphic symbol that represents a language understood by a person so that others can read the graphic symbol to understand the language and graphic images. (Apriyanti, 2020)

Descriptive essay

Composing is a series of activities in expressing the results of thought using written language to be presented to others so that the meaning is understood (Sari et al., 2018). This descriptive writing skill aims to empower students to express their thoughts, opinions, and experiences through creative writing. Improving students' writing ability is expected to increase the achievement of curriculum goals and ultimately the achievement of national education goals that have been set. Writing skill is the ability to identify the thoughts and feelings that are most important to other parties by using written language (Rohmat, 2018).

Mind Maps

The mind mapping method is also a note-taking technique developed by Tony Buzan in the 1970s that bases his research on brain activity by writing down or marking the major theme in the middle and writing down the subthemes and details around them. This mind map recording technique is based on how the brain processes information (Wati &

Sudigdo, 2019). Buzan in (Budiyono & Aryanti, 2016) explains that the concept map model is a model that correctly studies how the brain stores information in branching nerve cells. Concept maps are "the easiest way to get information in and out of the brain. Mind mapping is a creative and effective way to take notes that map our minds." In addition to improving writing skills, in another study (Astriani et al., 2020) it was stated that "mind mapping can be used as a strategy to train metacognitive skills through learning because it has a significant effect on metacognitive skills test results as indicated by an increase in metacognitive skills test results. ."

Novak was one of the first to introduce concept maps. He defined mind maps as a tool for organizing and representing knowledge. It usually contains concept words surrounded by a grid, and the relationship is determined by connecting the words with lines. Martin suggests that concept maps are a guide for teachers to show the relationship between key ideas and lesson plans. In their journal (Astriani et al., 2020) stated concept maps or mind mapping is a technique for visualizing the relationship between concepts. This reflective tool allows students to play with colors and create pictures with mapping materials.

Taken from another study (Avdagic et al., 2021) mentions the difference between concept maps and mind maps. Concept maps are hierarchical and written canonically from top to bottom, with the more general or important concepts at the top. We can make connections between concepts at any level, represented by labeled arrows that form a network of "propositions" (see Figure 1 for an example of a concept map). Mind maps are usually expressed radially, with sub-concepts appearing further from the central concept. Personal attention, reasoning, analysis, planning, coordination, and synthesis skills are developed to organize information about problems and their relationships. Mind maps usually do not have labels to show

relationships between concepts, may use colors to highlight similarities or differences, often show only first-order hierarchical

relationships, and do not provide a graphical representation of concepts (See Figure 1 for an example of a mind map).

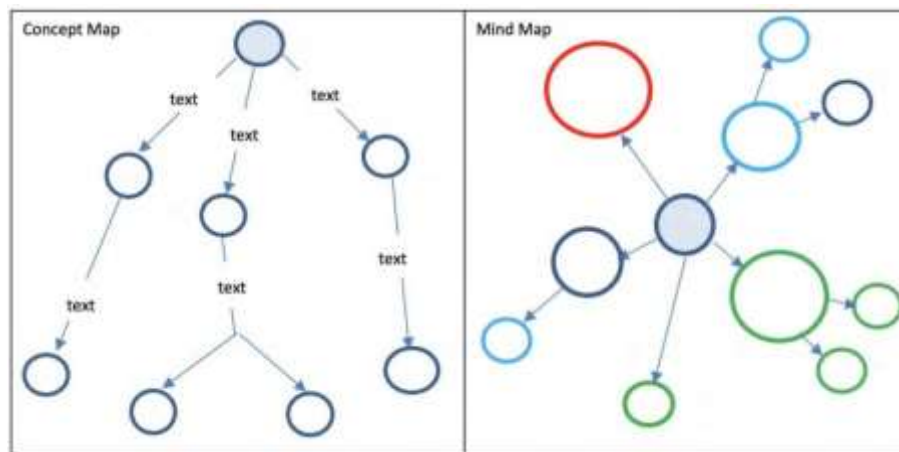


Figure 1. Mind Map

Based on research results (Ermaneli, 2018; Fauzi, 2018; Hartati & Thahroni, 2018; Khasanah, 2019; Saharah & Indihadi, 2019; Subakti et al., 2020; Subakti & Handayani, 2020; Yonani et al., 2021) state that the use of a concept map or mind mapping model can improve students' writing skills because the model in its application has advantages (Budiyono & Aryanti, 2016). Another study (Gavens et al., 2020) describes the purpose of the experiment reported here to investigate whether mind mapping adds any value as a learning technique to testing. These results indicate that the popularity of mind mapping in learning practices does not reflect its effectiveness. We discuss the results in terms of the need for teaching practice that is based on evidence-based educational theory rather than relying solely on intuition.

Based on the results of research (Polat & Aydın, 2020), it was revealed that mind-mapping activities that improve the critical thinking skills of children aged 48-72 months through philosophical inquiry significantly improve their critical thinking skills. However, it was concluded that large-group mind-mapping studies were more effective in

developing children's critical thinking skills than individual mind-mapping studies.

In another study (Polat et al., 2022) stated that effective scientific results from mind-mapping practices can be found in the literature, at various levels of the education system, and in various fields of learning. Studies show that mind mapping contributes to basic academic skills such as reading, writing, science, and math, as well as problem-solving skills, creative thinking and science teaching, creativity, levels of internal motivation, and memory development in learning.

Another research study (Akanbi et al., 2021) showed that there was a statistically significant effect of mind-mapping learning strategies on high school physics students. Students who are taught physics using mind-mapping learning strategies perform better than those taught by traditional methods. This may be because mind maps stimulate interest in learning, encourage creative thinking, and promote the ability to express oneself when using mind mapping. The results of this study are also almost the same as those (Mustui, 2021) which also describes the conceptual understanding of the science field of study about atoms, but the difference is that the



research subject is prospective science teachers. Likewise, research (Jena, 2019) compares the concept map of spiders & concept maps of the hierarchy in showing the performance of the concepts of photosynthesis and respiration.

In another study (Polat & Aksin Yavuz, 2022; Polat & Atış-Akyol, 2021). One of the interesting findings of this study was the significant difference between children's and student-teacher total scores on the Play Mind Map. The children had more pictures than the teacher students but did not have an association level of 3 or 4. The groups formed by the second-stage children were far superior to those of the teacher trainees. A closer look at the relationships between children's play reveals that personal names (such as "tuna" and "dirara"), places (such as "home" and "school"), and emotional adjectives (such as "happy" and "confused"). You can see this indicates that the social and physical context of play can be divided into objects (e.g., cloth, books, chocolate) and digital games ("PlayStation", "console", "online game", "Computer", etc.).

METHOD

My research method is qualitative, with a problem-solving research design. Problem-solving is an approach whose data is in the form of words or statements obtained through interviews, documents, observations, and others. Classroom action research is carried out to learn in the classroom or to improve the quality of learning. The characteristics of classroom action research are as follows (1) the problem comes from the setting/class where the research is conducted; (2) the problem-solving process is carried out cyclically, and (3) the aim is to solve learning problems in the classroom or improve the quality of learning in the classroom (Susilowati, 2018).

The research subjects were 24 students of class VI at SDN Blimbing 2. The data in this study are data about teacher activities and

student activities as well as data about students' writing skills, which are collected by (1) the test method is a method used to determine the knowledge a person has by using questions within certain limits. The test method used in this research is in the form of daily tests conducted at the end of the cycle to obtain the desired data, and (2) the method of observation, or what is called observation, includes activities of focusing attention on objects using all the senses. Here, the teacher, as a researcher, makes observations of all phenomena that appear in each cycle. I do not know the presence of teachers as researchers and collaborators as an object of research, because the observations made are participatory in the form of team teaching. I observed the observation technique used in this study using a format that had been prepared so that the collaborators only had to put a \checkmark (checklist) mark on the observation sheet. Observation of the learning process focused on the activity and intensity of student involvement during the learning process at each writing stage, namely from the topic discovery stage, making concept maps for the descriptive essay writing stage. For observation of learning outcomes, the focus is on writing produced by students. The aspects observed in the learning process include (1) liveliness, (2) courage, (3) seriousness, and (4) enthusiasm. Observational qualifications include good (B), sufficient (C), and poor (K).

Data analysis techniques are a very important element in conducting research every time. This study uses descriptive analysis. Descriptive analysis is a simple statistical analysis model, namely by comparing the average percentage, then the average increase in each cycle. From the results of the repetition obtained, I can interpret it as student learning completeness. In this study, for individual and classical student mastery learning, the student mastery guidelines were used, as follows.

1. Individual Mastery

A student can be said to have completed

his studies if he has achieved a minimum mastery level of 60% or a minimum score of 71. I adjusted this value based on the Minimum Completeness Criteria (KKM) currently being implemented at school.

2. Classical Mastery

Meanwhile, a class is said to have achieved learning mastery if at least 85% of the number of students in the class has achieved individual mastery.

The following is the percentage of action success rates during the study:

$90\% \leq SR \leq 100\%$	= Very Good
$80\% \leq SR \leq 89\%$	= good
$70\% \leq SR \leq 79\%$	= enough
$0\% \leq SR \leq 69\%$	= less

RESULTS

Before conducting research by applying the mind map model to improve the ability to write descriptive essays, the

researcher first made preliminary observations. Preliminary observations in the form of interviews with Indonesian language teachers at SDN Blimbing 2 Malang, based on the results of interviews on initial observations that class IV, which consists of one class with 24 students, tends to be less active in learning. From the results of interviews with Indonesian teachers, information was obtained that the lecture method dominated learning in class IV, so students had a limited learning experience because their learning activities were only listening.

Writing skills are an important factor in supporting student learning success because with good writing skills, students will find it easier to write good and correct essays. After processing the data from the pretest results, descriptive statistics were obtained consisting of the following range of values, frequencies, percentages, and average values:

Table 1. Pre-test results Essay Writing Ability

No	Categories	Value Range	Frequency	Percentage	Average
1	Very Good	80 - 100	-	-	54
2	Good	70 - 79	-	-	
3	Enough	60 - 69	9	38 %	
4	Low	50 - 59	14	58 %	
5	Very Low	40 - 49	1	4 %	
Amount			24	100 %	

Based on the data in the table above shows that the ability of sixth-grade students of SD Negeri Blimbing 2 Malang in writing essay descriptions is still low. This can be seen from the acquisition of average results that only reached 54. Of the total number of students, which amounted to 24 students. Where the results that have been obtained are 4% very low Category, a low category with a percentage of 58%, There is also a sufficient category with a percentage of 38%. From the results of this pre-test can be seen from the results of the percentage is still a lot of students who have difficulty in making essay descriptions caused students are still not accustomed to writing essays, from the subject

teachers also rarely involve students to be active in writing practice activities.

After seeing the results of the pre-action test of such students, it is necessary to take an action to improve students' ability to write a descriptive essay. The action is in the form of learning to write a descriptive essay with a mind map model. This mind-mapping Model is done to make it easier for students to write essays. The steps of learning to write a mind mapping are expected to motivate students that writing essays are easy and fun. This learning is also expected to help students to understand how to write a descriptive essay properly and correctly. Thus, this learning will help students to improve their essay-writing skills.

The application of mind mapping to write descriptive essays in this study was carried out in the following stages: (1) students chose a topic to describe, it could be descriptions of friends, family, etc., (2) students mentioned the characteristics of the topics to be described, (3) students wrote the characteristics of the topic to be described into a concept map, (4) students parsed the concept

map from topic characteristics into several sentences, (5) students arranged several sentences into paragraphs and combined paragraphs into a full descriptive essay.

Based on the results of data analysis, information was obtained that students' ability to write descriptive essays had increased. I can see the increased understanding of each indicator in table 2.

Table 2. Improvement of students' writing skills

No	Indikator	Cycle 1	Cycle 2	Improvement of students' writing ability
1	Determine the topic	13%	14%	1%
2	Preparation of mind maps (mind mapping)	13%	15%	2%
3	Mind map development	13%	14%	1%
4	Accurate choice of words/diction	14%	14%	0%
5	Use of spelling and punctuation	11%	12%	1%
6	Conformity of content with the title	12%	13%	1%

Based on table 2 above, it can be seen that the ability of students in determining the topic is 13%, the preparation of mind maps is 13%, the development of mind maps is 13%,

the accuracy of word choice/diction is 14%, the use of spelling and punctuation is 11%, while the suitability of the title with the content is 12%.

Table 3. Cycle Test Result

No	Test Result	1st Cycle	2nd Cycle
1	Average	68,7	75,2
2	Top rated	78	83
3	Lowest value	59	70
4	Number of completed students	10	24
5	Number of incomplete students	14	0
6	Percentage of completeness	42%	100%

Based on table 3 above, it is known that the number of students who have completed their studies is only 10 students out of 24 students, and the percentage of student learning completeness is 42%, this indicates that the percentage of learning completeness has not reached the specified KKM. Whereas in cycle 2, the number of students who completed their studies was 24 students out of

24 students, and the percentage of student learning completeness was 100%, this shows that the percentage of learning completeness had not yet reached the specified KKM. This is because essay writing is not seriously taught to students, the teacher explains theories about writing essays, and I do not give students the opportunity to practice.

Table 4. Student Activity Observation Results

No	Student Activity Descriptor	1st Cycle			2nd Cycle		
		Max Score	Observer Score		Max Score	Observer Score	
			1	2		1	2
1	Early activities	20	15	15	20	18	18
2	Core Activities	60	42	40	60	45	45
3	Final Activities	10	8	8	10	10	10
Total Score		90	65	63	90	73	73
Average score percentage (SR)			72%	70%		81%	81%
Success Rate			Enough	Enough		Good	Good

Based on table 4 above, I know that the results of observation of student activity in the implementation of the 1st cycle of the first meeting are quite good. This is because students are quite happy with the application of learning to write a descriptive essay using mind mapping, which they have only been able

to do so far. The implementation of the second meeting was not held due to the observation, at this meeting will only be held tests so students feel a little tense. And experienced an increase in cycle 2. This shows that the results of observations of student activity have increased.

Table 5. Observation results of teacher learning management

No	Teacher Learning Management descriptor	1st Cycle			2nd Cycle		
		Max Score	Observer Score		Max Score	Observer Score	
			1	2		1	2
1	Early activities	30	15	20	30	25	25
2	Core Activities	60	45	50	60	50	55
3	Final Activities	10	8	7	10	9	10
Total Score		100	68	77	100	84	90
Average score percentage (SR)			68%	77%		84%	90%
Success Rate			Less	Enough		Good	Very Good

Based on table 5 above, I know that the results of observations of Teacher Learning Management in the implementation of cycle 1 of the first meeting were quite satisfactory, but teacher preparation was still not optimal. The implementation of the action at the second meeting was not held because the observation at this meeting was only a test. And the results of observations of teacher learning management in cycle 2 are very good. Because

the teacher's preparation is maximized and the teacher can estimate the time correctly.

DISCUSSION

Application of Mind Map Learning Model

Concept maps or mind mapping are a technique for projecting or visualizing abstract concepts or subject matter into diagrams, where there are lines that connect between concepts and above the lines are written

keywords to describe the forms of relationships between concepts.

The mind mapping model as a way to make it easier for students to write descriptive essays with the stages of its application are as follows: (1) students choose a topic to describe, it can be descriptions about friends, family, etc., (2) students mention the characteristics of the topic to be described, (3) students write the characteristics of the topic to be described into a concept map, (4) students break down the concept map from topic characteristics into several sentences, (5) students compose several sentences into paragraphs, and combine paragraphs into a complete descriptive essay. The implementation of the actions in this study consisted of two cycles, namely cycle I and cycle II.

In the implementation of the first cycle of action, the teacher provides learning material for writing descriptive essays with a mind mapping model. From the results of observation and reflection in cycle I, information was obtained that student activity was still not optimal, in addition to the fact that in the stage of finding topics they were still working in groups, students also complained that it was difficult to get ideas because students were not used to it. In other words, the application of the mind map model in the implementation of action 1 is still not optimal and there are many deficiencies, so the teacher will fix it at the implementation stage of action 2.

In carrying out action 2, the teacher continues with the same material and the same model but is no longer in groups. From the results of observation and reflection in cycle 1, information was obtained that students' activities were maximized. They began to write descriptive essays fluently, and no longer depended on the teacher in finding topics.

In cycle 2, the implementation of the mind mapping model has run optimally and is as expected. Teachers can condition the class well, besides that students are able to work

well together in the learning process. If seen from the results of observation, reflection, and data analysis, I can see that the application of the mind mapping model cycle 1 experienced an increase in cycle 2. I can see this increase both in student activities and in teacher activities.

Student Responses During Learning Takes Place

Learning to write essays using the mind mapping model consists of three stages, namely, (1) determining the topic, (2) compiling a concept map or mind map, and (3) writing a descriptive essay. During the learning process, when the teacher explains the enthusiasm of the students are very good at paying attention to the teacher's explanation because learning like this is something new for students and has never been practiced in their class.

When learning to write essays, all students look enthusiastic in carrying out the stages of writing essays with the mind map model given to them by the teacher. Students learn actively, and there is a sense of responsibility to learn as best they can in doing their assignments. Students seem motivated so that they get excellent results. Then, during the test, they were very serious about completing their composition perfectly.

Mastery learning

From the results of data analysis, the percentage of students' learning completeness in cycle 1 was 42% and in cycle 2 was 100% meaning that the percentage of students' learning completeness had increased. In cycle 2, the percentage of students' learning completeness had reached the KKM used by class IV teachers at SDN Blimbing 2 Malang, namely 75% of students achieved test scores ≥ 70 (scale 1-100) and the class average achieved scores ≥ 70 (scale 1-100).

The student's learning completeness is because, the application of this mind map model is a learning model that projects or visualizes abstract concepts or subject matter in the form of diagrams, there are lines that

connect between concepts, and above the lines are written keywords to describe the form of relationships between concepts. Making it easier for students to map the material that they will assemble into an essay.

CONCLUSIONS AND RECOMMENDATIONS

Based on the description and discussion of the results, it can be concluded that the application of mind mapping to improve the descriptive writing skills of Class VI students of SD Negeri Blimbing 2 Malang has a good effect on students' ability to write descriptive essays so that students can write essays at the right stage and improve learning outcomes.

We expect teachers to know how to use learning models more flexibly. The mind mapping model is very suitable for learning Indonesian in elementary schools, especially for writing descriptive essays. I hope that other researchers can conduct further research in other schools by improving the learning model steps.

ACKNOWLEDGMENT

During the process of completing the writing of this article, the author obtained a lot of guidance and assistance from various parties, the author is fully aware that without his help and encouragement it is difficult to complete this article. For that in this simple work the author will express his gratitude to Mrs. Dr. Shirly Rizki Kusumaningrum, M.Pd. and Mrs. Dr. Radeni Sukma Indra Dewi, S.S., M.Pd as a lecturer of Bahasa Inggris untuk Penulisan Karya Ilmiah at the State University of Malang.

REFERENCES

Akanbi, A. O., Olayinka, Y. W., Omosewo, E. O., & Mohammed, R. E. (2021). Effect of Mind Mapping Instructional Strategy on Students' Retention in Physics in Senior Secondary Schools. *Anatolian Journal of Education*, 6(1),

145–156.

<https://doi.org/10.29333/aje.2021.6112a>

Andriyani, N., Dalman, & Idawati. (2021). Upaya Meningkatkan Kemampuan Menulis Teks Berita Melalui Media Komik. In P. SAMASTA (Ed.), *Prosiding SAMASTA: Seminar Nasional Bahasa dan Sastra Indonesia* (pp. 565–570). Fakultas Ilmu Pendidikan, Universitas Muhammadiyah Jakarta. <https://jurnal.umj.ac.id/index.php/SAMASTA/article/view/565-570>

Apriyanti, Y. (2020). *Hubungan Penggunaan Media Grafis Terhadap Keterampilan Menulis Teks Iklan Siswa Kelas Viii Smp-Negeri 2 Nanga Pinoh Kabupaten Melawi*. digilib.ikipgriptk.ac.id

Astriani, D., Susilo, H., Suwono, H., Lukiati, B., & Purnomo, A. R. (2020). Mind mapping in learning models: A tool to improve student metacognitive skills. *International Journal of Emerging Technologies in Learning*, 15(6), 4–17. <https://doi.org/10.3991/IJET.V15I06.12657>

Avdagic, E., May, F., McClean, T., Shackleton, F., Wade, C., & Healy, K. (2021). Mind mapping as a pragmatic solution for evaluation: A critical reflection through two case studies. *Practical Assessment, Research and Evaluation*, 26, 1–19.

Budiyono, H., & Aryanti, P. T. (2016). *Pengaruh Penerapan Model Peta Konsep dan Penalaran terhadap Kemampuan Menulis Esai Mahasiswa. Bahasa dan Seni*, 86–98.

Ermaneli. (2018). Peningkatan kemampuan menulis karangan deskripsi dengan menggunakan peta konsep bagi siswa kelas VI SDN 44 Lubuk Anau Kecamatan Bayang. *Jurnal Penelitian Guru Indonesia*, 3(1), 70–77.

Fauzi. (2018). *Keefektifan Penerapan Model Peta Konsep dan Discovery Inquiri*



- Learning dalam Pembelajaran Menulis Teks Deskriptif Pada Siswa Kelas VII SMP N 4 Sungguminasa Kabupaten Gowa.* 206–209.
- Gavens, N., Doignon-camus, N., Chaillou, A., Zeitler, A., & Popa-roch, M. (2020). Effectiveness of mind mapping for learning in a real educational setting. *The Journal of Experimental Education*, 0(0), 1–10. <https://doi.org/10.1080/00220973.2020.1848765>
- Hartati, R., & Thahroni. (2018). Pengaruh metode SCL dipadu peta konsep terhadap pemahaman bacaan dan menulis karya ilmiah dalam era MEA. 2(1), 58–64.
- Jena, A. K. (2019). Concept Map in Photosynthesis and Its Effects on Achievement and Self-Classroom Management. *International Journal of Research*, 10(4), 1–18. <http://files.eric.ed.gov/fulltext/ED603053.pdf>
- Khasanah, K. (2019). Peta konsep sebagai strategi meningkatkan hasil belajar siswa sekolah dasar -. *Jurnal EduTrained*, 3.
- Lubis, S. S. W. (2021). Pembelajaran Menulis Essai Melalui Media Massa Surat Kabar Dalam Pembentukan Berpikir Kritis. *Pionir: Jurnal Pendidikan*, 10(2), 109–130.
- Mustui, O. E. (2021). Qualitative Evaluation of Prospective Science Teachers ' Concept Maps about the Atom. *International Journal of Progressive Education*, 17(1), 0–2. <https://doi.org/10.29329/ijpe.2020.329.11>
- Polat, Ö., & Aksin Yavuz, E. (2022). The Mind Map: A Tool for Exploring Children's and Teacher Trainees' Conceptions of School, Friendship, and Play. *International Journal of Progressive Education*, 18(2), 34–48. <https://doi.org/10.29329/ijpe.2022.431.3>
- Polat, Ö., & Atış-Akyol, N. (2021). Mind mapping as a new method that supports readiness for primary school. *Research in Pedagogy*, 11(2), 431–450. <https://doi.org/10.5937/istrped2102431p>
- Polat, Ö., & Aydın, E. (2020). The effect of mind mapping on young children's critical thinking skills. *Thinking Skills and Creativity*, 38. <https://doi.org/10.1016/j.tsc.2020.100743>
- Polat, Ö., Sezer, T., & Atış-Akyol, N. (2022). Collaborative learning with mind mapping in the development of social skills of children. *Participatory Educational Research*, 9(1), 463–480. <https://doi.org/10.17275/per.22.25.9.1>
- Rohmat, S. M. K. Al. (2018). Pembelajaran Menulis Teks Deskripsi Dengan Menggunakan Metode Discovery Learning Pada Siswa Kelas X. *Parole*, 1(6), 977–988. <http://jurnal.unissula.ac.id/index.php/jpbsi/article/view/2950/2750>
- Saharah, S., & Indihadi, D. (2019). Penggunaan Teknik Mind Mapping pada Keterampilan Menulis Ringkasan Siswa dalam Pembelajaran Bahasa Indonesia. 6(1), 9–15.
- Sari, F. P., Basri, I., & Ratna, E. (2018). Korelasi keterampilan membaca pemahaman karangan eksposisi dengan keterampilan menulis karangan eksposisi. *JPBSI: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 7(1), 117–124. <https://doi.org/https://doi.org/10.24036/9550-019883>
- Sidabutar, Y. A. (2021). Pengaruh Kemampuan Berpikir Kreatif terhadap Kemampuan Menulis Karangan Deskripsi Siswa Sekolah Dasar. *Jurnal Basicedu*, 5(6), 5379–5385. <https://doi.org/10.31004/basicedu.v5i6>



- 1658
Subakti, H., & Handayani, E. S. (2020). *Pengembangan Menulis Cerita Pendek Kearifan Lokal Menggunakan Model Mind Mapping Siswa SD Kota Samarinda*. Vol. 21(No.2), 171–314.
- Subakti, H., Handayani, E. S., Muslimah, A. A., Shinta, S., & Alfayed, D. (2020). *Pengenalan Model Mind Mapping dalam Pembelajaran Menulis Cerita Pendek di SD Negeri 002 Sungai Pinang Kota Samarinda*. 01(01), 71–79.
<https://doi.org/10.46306/jabb.v1i1.6>
- Susilowati, D. (2018). Penelitian Tindakan Kelas (PTK) Solusi Alternatif Problematika Pembelajaran. *Edunomika*, 02(01), 36–46.
<https://doi.org/DOI>:
<http://dx.doi.org/10.29040/jie.v2i01.17>
- 5
Wati, S. H., & Sudigdo, A. (2019). Keterampilan Menulis Karangan Narasi Sejarah Melalui Model Pembelajaran Mind Mapping Bagi Siswa Sekolah Dasar. *Prosiding Seminar Nasional PGSD*, 1(1), 274–282.
<https://jurnal.ustjogja.ac.id/index.php/sn-pgsd/article/view/4760>
- Yonani, M., Amrina, W., & Fadli, M. (2021). *Pengaruh Penggunaan Model Pembelajaran (Mind Mapping Peta Konsep) terhadap Hasil Belajar Menulis Teks Berita Pada Siswa Kelas VIII SMPN 2 Kota Jambi*. 2(2), 671–678.
<https://doi.org/https://doi.org/10.38035/jmpis.v2i2>