UTILIZING CONCEPT MAPS TO ENHANCE STUDENTS' WRITING SKILLS

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Article Info	Abstract	
Article History Received: May 2023 Revised: June 2023 Published: July 2023	Writing is one of the difficult skills in a language. The difficulty of writing includes spelling, punctuation, word choices, and so on. However, many students already studied writing since middle school. As a result, many of them have not yet been able to write correctly. The aim of this paper is to find out an increase in	
<i>Keywords</i> Writing skills; Descriptive text; Concept maps.	descriptive writing skills by utilizing a concept map. This study used descriptive and quantitative research on car design. The sample was 20 students using purposive sampling. The instrument was an objective test. The procedure for collecting data used to test distribution and analysis data. The finding showed that students had excellent to very good achievement in writing skills through concept maps. It was indicated by the results of the mean score in the post-test. it indicates that the student's writing ability was in good to Very Good criteria. It means that writing a descriptive text with a concept map was better than writing descriptive text without a concept map. This research found the pedagogical implication that concept maps help teachers in providing active learning, creative, effective, and fun for students according to learning style. Newly, it can increase awareness of teachers on students' learning difficulties and efforts to overcome their obstacles in writing.	

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INTRODUCTION

Writing is an essential skill in English education and encompasses various language components such as spelling, grammar, vocabulary, context, and punctuation. It holds significant importance, particularly in written communication. Siahaan (2008) affirms that writing serves as a means for writers to convey information to readers. In Indonesian senior high schools, English writing has been taught to students for a considerable period of time. To develop English writing skills in Senior High School, students need to become proficient in various types of text. One such type is descriptive text, which involves providing a detailed account of a specific object, animal, person, or other subject. To excel in this text type, students should regularly engage in writing activities that focus on describing their surroundings (Fadli et al., 2022; Fatiani et al., 2021). Students should practice identifying, describing, and creating descriptive text using the generic structure and linguistic features associated with this text type, such as using the identification and description components, employing the simple present tense, and utilizing appropriate conjunctions (Hammond as cited in Sasongkos, 2017)

In a preliminary study conducted by Rubiah (2014), it was observed that senior high school students encountered difficulties when it came to writing a simple composition, specifically in generating ideas and coherently organizing them. Consequently, they experienced a lack of motivation to learn further. This situation called for an effective teaching technique to address these challenges. Therefore, nowadays, teachers need to adopt a

unique approach when teaching writing (Kazemian et al., 2021; Haerazi & Kazemian, 2021), particularly focusing on descriptive text and one approach that can be used to increase writing skills is with a concept map.

In writing, a concept map is a visual tool that helps organize concept ideas. It involves creating a graphical representation of concepts and their relationships, allowing writers to brainstorm, plan, and structure their thoughts more effectively. By using concept maps, writers can visually see the connections between different ideas, identify key points, and develop a coherent and logical flow in their writing. Concept maps serve as a valuable tool for generating ideas, organizing content, and improving the overall structure and clarity of written work. In fact, for international students writing academic English such as concept maps can be useful. In addition to other challenges, English language learners face the challenge of using a second language to write academic texts that are coherent (ideas are clear to the reader) and cohesive (presentation sequence and connection between ideas are clear). The research has supported the idea that concept maps help with this (Wan Mohammed & Omar, 2008; Villalon & Calvo, 2011; Min, 2014).

Utilizing of concept map in education is a creative way for students how to learn about a certain subject. By doing concept mapping, it can help students to study more and funny in supporting learning English at school. In accordance with Novak (1970) explained that concept maps have come to be used much more widely in different subject areas and with different types of learners. They graphically represented different ideas written in circles or other shapes, and include lines or arrows showing directionality between the ideas. They also include words or phrases which describe the precise nature of the connection between the ideas. In addition, Lee et. al, (2007) analyzed the possibilities of applying concept mapping with writers of divergent abilities. Nevertheless, the theories still lack of confirmation what skill is specifically to be learned. By utilizing a concept map, it can make the emphasis on writing skills more effective rather other skills.

Besides that, some researchers have shown finding related to the use of Concept Map in learning writing for students. Previous research that was done by Al-Shaer (2014) about the effectiveness of employing through utilizing a concept map at Al-Quds Open University (QOU). Then, Java (2003), he founds the students' learning atmosphere from observation and field notes described enjoyable of students' learning interaction by utilizing a concept map. His questionnaire results indicated 47% of the student's responses were "strongly agree" and 53% of their responses were "agree" for the benefit of concept mapping implementation. As mentioned, it can be said that the concept map has a good effect on improving students' motivation and giving real experience to students. The second research was done by Kurniati (2019) it is stated that concept mapping promotes collaborative learning and communication. Students can collaborate in creating concept maps, discussing and sharing ideas, and providing feedback on each other's work. This collaborative approach enhances peer interaction, engagement, and a deeper understanding of writing concepts. Furthermore, research has shown that using concept maps as pre-writing activities helps students overcome writer's block, stimulate creativity, and reduce anxiety about writing tasks. It provides a structured framework for students to brainstorm ideas and organize their thoughts before starting the actual writing process. The other research was done by Rubiyah (2018). The findings revealed that using concept maps improved students' average scores in descriptive writing. The proper implementation of the concept mapping technique by the teacherresearcher resulted in increased students' enthusiasm and engagement throughout the learning process. Additionally, it effectively enhanced student participation and active involvement in classroom activities. Therefore, based on previous research and to determine whether the concept map can enhance students' writing skills at the senior high school level, it is crucial to conduct research using the concept map as a medium. This research will provide insights into the quality of students' outcomes in learning writing skills and confirm the concept map's efficacy as valuable tool for teaching writing, particularly in descriptive text.

A Theory of Concept Mapping

Concept mapping, also known as mind mapping or knowledge mapping, is a technique used to visually represent relationships between ideas or concepts. While concept mapping has been widely used in various fields, including education, its history in the context of writing learning can be traced back to the late 20th century. The origins of concept mapping can be attributed to the work of educational psychologist Joseph D. Novak and his colleague, Albert J. Canas. In the 1970s, Novak developed the concept mapping methodology as a tool for organizing and representing knowledge. He believed that concept mapping could enhance learning by encouraging meaningful connections between concepts and facilitating the construction of mental models. Rubiya (2018) stated that a concept map is a visual tool that illustrates the connection between ideas, images, or words, similar to how a sentence diagram reveals the structure of a sentence, a road map depicts the layout of roads and towns, or a circuit diagram demonstrates the functioning of an electrical device. In a concept map, each word or phrase is linked to another and ultimately connects back to the initial idea, word, or phrase. By showcasing relationships, concept maps enhance logical thinking and study abilities, enabling students to perceive how individual ideas interrelate to form a comprehensive framework.

Furthermore, Zimmaro and Cawley as cited in wan and Omar (2008) have described concept mapping as a method of structuring thoughts in a way that enables a logical and coherent flow, concept mapping involves a central theme or topic, accompanied by interconnected branches that illustrate the relationship between ideas. This process assists students in logically composing paragraphs, as the points within the concept map circles guide organizing sentences into cohesive paragraphs. Considering the aforementioned statement, it is evident that concept mapping holds significant value for students when it comes to writing effectively.

Similarly, White (2011) describes a concept map as a representation of the relationships among a set of interconnected concepts and ideas. It serves as a tangible depiction of how the mind comprehends a specific topic. Constructing a concept map encourages individuals to reflect on their existing knowledge and identify areas where further understanding is needed. In a concept map, concepts are typically depicted as single words enclosed in rectangles or boxes and they are connected to other concept boxes through arrows. The arrows are accompanied by words or brief phrases that define the relationships between the connected concepts. Major concept boxes often have multiple lines extending to and from several other concept boxes, creating a network of interconnections.

Furthermore, concept mapping has been integrated into writing instruction and curriculum design. Educators incorporate concept mapping as a teaching tool to guide students in planning, organizing, and revising their writing. By analyzing and modifying their concept maps, students can refine their arguments, identify gaps in their thinking and improve the overall coherence of their written compositions. Toi's (2009) study reveals that the implementation of mind mapping can significantly enhance children's word recall compared to the use of lists, resulting in memory improvements of up to 32%. Similarly, research conducted by D'Antoni and Zipp (2005) involving 14 physical therapy students found that 10 of them agreed that employing the mind map technique enabled them to better organize and integrate the information presented in their coursework. So utilizing mind mapping for lesson planning can assist teachers and trainers in establishing a coherent plan or teaching pathway while also enhancing the retention of the subject matter. This approach contributes to

increased teaching confidence and facilitates the smooth progression of educational programs (Boyson, 2009).

Miller (2008) as cited in Rubayah (2018) presents a comprehensive framework that outlines seven sequential stages for effectively applying the concept mapping technique in the context of writing. These steps provide a structured approach to guide the process of concept mapping for writing purposes. The stages can be summarized as follows: Step 1: Begin by determining the overall subject or main theme, which serves as the central focus of the writing piece. This central theme is represented by a circle or square, positioned at the center of the concept map. Step 2: Engage in a brainstorming session to generate ideas and concepts associated with the general topic. Jot down these ideas on a separate sheet of paper. Step 3: Select words and phrases that align most effectively with the overarching theme and provide supporting information for the main concepts. These selected words and phrases will serve as the main components of the concept map. Step 4: Transfer the chosen words or phrases onto the paper containing the central topic. Position them around the central circle or square, encircling or squaring them off. Connect these subtopics to the main topic using lines, indicating their relationship and association. Step 5: Repeat the brainstorming and branching process for each of the circled subtopics, ensuring that a sufficient number of ideas and information have been gathered for writing. Step 6: Utilize the concept map as a tool for organizing the writing. Ensure that ideas that exhibit close connections on the concept map are also closely interconnected in the written piece. This helps to maintain coherence and logical flow in the writing. Step 7: Regularly refer back to the concept map throughout the writing process. The concept map serves as a visual representation of the key points and their interrelationships, aiding in maintaining focus and ensuring that all relevant information is included. By following these sequential stages, writers can effectively utilize concept mapping as a tool to organize their thoughts and ideas, facilitating the development of wellstructured and coherent written work. The concept map serves as a visual guide, helping writers to visualize the relationships between concepts and maintain clarity and coherence throughout the writing process.

Fahim and Rahimi (2011) provide valuable insights into the considerations essential for constructing an effective concept map, in line with the aforementioned steps. These considerations can be summarized as follows: The initial step in creating a concept map involves the identification of a central idea that will serve as the focal point of the map. Additionally, key concepts that are integral to understanding the central idea need to be determined and included in the map. The types of relationships that exist between and among the concepts must be specified. This entails clearly defining the nature of the connections or associations between concepts. These relationships could include causal links, hierarchical relationships, or associations based on similarities or differences. The establishment of connections or associations between concepts is crucial. This step involves visually representing how concepts are interconnected or associated with one another. By clearly depicting these connections, the concept map aids in the understanding of the relationships between different concepts. The organization of concepts in a hierarchical manner is vital. This hierarchical structure involves arranging the concepts in a way that ranges from the most general to the most specific. This organization helps establish a clear understanding of the relationships and dependencies between the concepts, providing a structured framework for comprehending the overall concept map. Connections between concepts that share horizontal relationships should be established, highlighting their interrelatedness. Similarly, connections should be made between concepts that exhibit hierarchical relationships. These connections visually represent the associations and dependencies between different concepts, facilitating a clear understanding of their interconnected nature. By considering these aspects, one can construct a comprehensive and visually engaging concept map that effectively represents the relationships between key concepts. The insights provided by Fahim and Rahimi (2011) offer a valuable guide for creating concept maps that promote a deeper understanding of complex topics and enhance knowledge organization.

Additionally, Novak and Canas (2006) highlight some significant elements of concept maps; First, the inclusion of a well-defined hierarchical structure within the map. Second, the capacity to identify and establish new connections between concepts, and last, the incorporation of specific examples or instances to enhance the understanding of a particular concept. Typically, these examples or instances are not enclosed within ovals or boxes, as they pertain to specific events or objects and do not represent concepts themselves (refer to Figure 1)

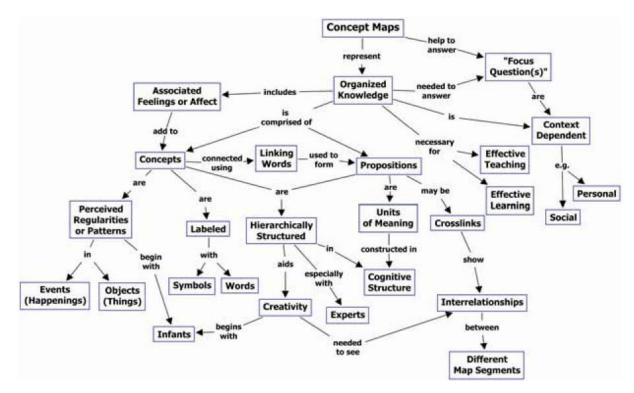


Figure 1. Illustrates the structure of a concept map, as outlined by Novak and Canas (2006:02). In their work, Novak and Canas provide a definition of a concept.

RESEARCH METHOD

The study employed Classroom Action Research as the research design, following a cyclic approach. As described by Kunto (2006), Classroom Action Research involves the active participation of a teacher in their classroom or school, with a focus on enhancing and refining the learning process and practices. According to Mulyasa (2009), this research design encompasses four key steps: planning, acting, observing, and reflecting. For data analysis, the researcher employed quantitative procedures in this study. To assess the students' engagement during the teaching and learning process, the data was analyzed and presented descriptively. The analysis focused on the data obtained from the writing test, which provided insights into the students' performance. Additionally, to gauge the improvement in the student's writing skills, quantitative data from the pre-test and post-test were utilized. The analytical scoring rubric was applied to objectively assess and compare the students' writing abilities before and after the intervention.

Research Design

The study design employed in this research was a collaborative classroom action research (CAR) which focused on enhancing the students' writing ability through the use of

concept mapping. The CAR followed a cyclic process consisting of several stages, including a preliminary study to identify and analyze the problems, action planning, implementation, observation, and reflection. These stages were adapted from Kemmis and McTaggart (2000:595) as cited in Astiantih

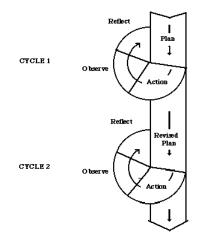


Figure 2. Adapted from Kemiis and McTaggart in Astiantih 2022

Planning

The researcher engaged in thorough preparation before implementing the action, drawing on the findings of the preliminary study. This preparation involved several key aspects, including designing an appropriate concept mapping model and developing a lesson plan for teaching writing. Additionally, the researcher focused on creating suitable materials and media for the instructional process and establishing success criteria. The success criteria were defined as follows: first, the students' mean score in their final writing should reach a minimum of 70, based on a scoring range of 25 to 100. Second, if 70% of the students actively participated in the writing activities and their levels of involvement were rated as "Good" or "Very Good," it would be considered indicative of success.

Implementation

In the implementation stage, the plan for teaching and learning writing through concept mapping was put into action following the completion of all necessary preparations. The researcher took on the role of the implementer, while an English teacher was designated as the observer responsible for conducting observations during the teaching and learning process.

Observation

During the observation stage, data collection was conducted through various means such as writing tasks, observation checklists, field notes, and portfolios. These instruments were utilized to gather data and determine whether the success criteria were met or not. Additionally, the collected data helped in identifying aspects of the strategy that required modifications in the subsequent planning phase.

Reflection

During the reflecting stage, two types of conclusions were drawn: cycle-based conclusions and a conclusion. The cycle-based conclusions were made to assess the effectiveness of each cycle and determine whether additional cycles were necessary to achieve the desired outcomes. These conclusions helped guide the decision-making process for further implementation. The conclusion was made to summarize the overall findings and improvements made in the teaching model for writing through concept mapping. This final conclusion provided a comprehensive description of the enhanced teaching model, highlighting the key aspects that had been refined and optimized throughout the study.

Population and Sample

The population was SMA Negeri 1 Bau-bau which is located at Jl Muh. Husni Thamrin No.29, Tomba' district, Wolio, bau-bau, southeast of Sulawesi. The school is comprised of three classes: ten grade, eleven grade, and twelve grade. On average, each class has 20 to 25 students. In terms of English classes, the school allocates four sessions of 40 minutes per week for each class, with two sessions of 40 minutes for each meeting. The sample of research subjects consisted of 20 students from the ten grade during the 2022/2023 academic year. The selection of these ten-grade students was based on several factors. Firstly, their writing ability was found to be unsatisfactory. Secondly, they faced challenges in generating ideas, maintaining relevance to the topic, and selecting appropriate words in their writing. Lastly, out of the observation, grade X2 was chosen for the study due to their lower performance in writing compared to grade X1.

Instruments

The research utilized various instruments to collect data in order to achieve its objectives. These instruments included field notes, questionnaires, and portfolios. Field notes were employed to observe and document the classroom conditions during the teaching and learning process in writing. These notes provided valuable insights into the instructional environment, including interactions between the teacher and students, classroom dynamics, and any noteworthy observations related to the writing instruction. Questionnaires were administered to the students on two separate occasions: before a pre-test and after a post-test. The initial questionnaire aimed to assess the students' English language proficiency and identify any learning difficulties they encountered, particularly in writing. This pre-test questionnaire provided a baseline understanding of the students' abilities and challenges prior to the implementation of the concept maps technique. The second questionnaire was administered after the implementation of the teaching technique, specifically using concept maps for writing instruction. It aimed to gather feedback from the students regarding their perceptions of the concept maps technique and its impact on enhancing their English writing skills. The post-test questionnaire allowed for an assessment of the students' perceptions of the effectiveness of the concept maps technique and provided valuable insights into their experiences and opinions.

Portfolios were utilized to collect the students' final scores and assess their progress throughout the research process. The portfolios contained samples of the students' written work, showcasing their development and improvement over time. These portfolios served as a means to evaluate the students' overall performance and the impact of the concept maps technique on their writing skills. By utilizing these instruments, the research aimed to gather comprehensive and diverse data, including observational data, self-reported perceptions, and objective measures of performance. This multi-faceted approach provided a holistic understanding of the effects of the concept maps technique on the students' English writing skills and allowed for a thorough analysis of the research findings.

Data Analysis

The analysis of the data will involve calculating the average scores of the pre-test and post-test for both cycle 1 and cycle 2. The writer will then compare the results of the pre-test and post-test to determine the outcome. These results will be compared against the minimum standard (KKM) set by the school, which is at least 70. If, after cycle 1, some students have not achieved success, the researcher will proceed with cycle 2. Classroom action research typically requires a minimum of two cycles. Therefore, if most of 20 students are successful in cycle 2, there is no need to continue with additional cycles. The research used quantitative techniques in the analysis the data. A test, which is a tool used to assess knowledge,

intelligence, ability, or attitude of individuals or groups, was conducted by the researcher. The test comprised a pre-test conducted before implementing the technique of concept map and a post-test at the end of the second cycle. These tests were used to measure the students' scores in writing skills. To measure the student's score the scoring rubrik is taken from Weigle (2002:116)

Component of scoring	scores	indicators
Vocabulary	4	A few errors in choice of words
	3	some errors in choice of words
	2	occasional errors in choice of words
	1	frequent errors in choice of words
Grammar	4	a few grammatical inaccuracies
	3	some grammatical inaccuracies
	2	numerous grammatical inaccuracies
	1	frequent grammatical inaccuracies
organization	4	most of the sentences are related to the main idea
	3	some sentences are related to the main idea
	2	few sentences related to the main idea
	1	the sentences are unrelated to each other
content	4	Relevant to the topic and easy to understand
	3	rather relevant to the topic and easy to understand
	2	relevant to the topic but is not quite easy to understand
	1	quite relevant to the topic but is not quite easy to understand

Table 1 Rubrics of Writing Skills

The scoring system for each component of writing ranges from 1 to 4, with 1 indicating poor performance, 2 indicating fair performance, 3 indicating good performance, and 4 indicating very good performance. Scale for 20 Students can be presented as follows.

1 (poor): 0% - 25% of students meet the criterion (0-5 students) - deemed as a failure.

2 (good): 26% - 50% of students meet the criterion (6-10 students) - deemed as a failure.

3 (better): 51% - 75% of students meet the criterion (11-15 students) - deemed as a success. 4 (very good/best): 76% - 100% of students meet the criterion (16-20 students). deemed as a

success.

RESEARCH FINDINGS AND DISCUSSION

Research Findings

Cycle 1

Planning

During this stage the researcher selected materials based on the teacher's annual program, which was based on the syllabus at the school. The chosen material focused on description text, specifically with subject of self-introduction. After that the researcher prepared the material, created a lesson plan, and designed the stages for implementing the action. In this stage teaching aids were prepared, including self-introduction texts and sheets of paper. These materials were included in the lesson plan appendix for the Class Action Research. The researcher prepared an observation checklist for the use of the concept mapping technique, which would be used to assess the teaching and learning process during the first cycle. Then Pre-tests and post-tests were prepared for the first cycle to evaluate students' progress.After that A list of students' names and scores for the first cycle was prepared.All these preparations were aimed at achieving the objective of the teaching and learning and learning process, which was to enhance students' writing skills through the given materials. *Implementing*

The collaborative teacher and the researcher entered the classroom, and the teacher began the class by greeting the students. After that The teacher then asked the class leader to lead the prayer. Before starting the lesson, the teacher gave the researcher an opportunity to introduce herself and explain the purpose of her visit to the class. Afterwards, the teacher checked the attendance list of the students. Prior to the lesson, the researcher administered a 60-minute pre-test on self-introduction to the students, before using concept mapping. She divided the test and moved around the class to supervise the students while they were taking the test. During the pre-test, the students wrote a self-introduction text. Many of them sought assistance from their peers and even asked the teacher about the structure of a self-introduction. The students were still unsure about arranging the sentences to form coherent paragraphs. The teacher emphasized the importance of the students completing the test independently, as it was intended to assess the comprehension of each student. *Observing*

During the first cycle, the researcher conducted observations of both the students and the teacher using checklists specifically designed for student observation and teacher observation. The main objective of this activity was to assess the teaching and learning process, gather relevant data, and observe the dynamics of the class. The students' various activities and participation were documented and recorded in a table for further analysis. *Reflection*

During this stage, in order to determine the notable progress in writing paragraphs for self-introduction or introducing others, the researcher analyzed the data obtained from the pretest and post-test conducted during the first cycle.

Cycle 2

Follows a similar structure to the previous cycle, aiming to assess the students' progress in writing using the simple present tense. This is done as the achievement level in this area did not meet the desired success indicator after the completion of Cycle I. *Planning*

The writer developed a lesson plan comprising three components: the opening, teaching and learning process, and closing. In the opening segment, the writer allocated 10 minutes for greetings, attendance check, motivation, and introducing the topic to capture the students' attention and pique their interest. The subsequent 70 minutes were dedicated to the teaching and learning activities, encompassing material review before, discussing grammatical errors, and exploring expressions within their writing. Finally, the last 5 minutes of the lesson were designated for the closing phase.

Implementing

The writer provided feedback on the students' first post-test and expressed appreciation for the significant improvements observed in their writing, particularly in terms of organizing and developing ideas. Then The writer began writing sentences with incorrect grammar on the whiteboard. The students attentively observed and some of them attempted to identify the errors in the sentences. Once the writer had written three sentences, she initiated a discussion by asking the students to point out any grammatical mistakes present in the sentences. After that The writer organized the class into four groups according to their seating arrangement. Each group received a whiteboard marker. The instructions were provided clearly by the writer. Initially, the students were tasked with selecting a memorable moment they shared together. Following that, they engaged in a competition with the other groups to create their Concept Maps on the whiteboard.

Observing

In general, the implementation of Concept Maps during the second cycle proceeded smoothly, and the students demonstrated improvement in their writing skills. During the third meeting, the writer shifted the focus to a discussion on grammar. Various examples were presented, and the students engaged in collaborative discussions. However, many of them encountered confusion when it came to using the past tense and understanding the passive voice. The writer provided clear explanations and assessed the students' comprehension through questions. Despite the grammar discussion, the class atmosphere remained somewhat unmotivated, and the students grew bored. To lighten the mood, the writer introduced a game that involved drawing Concept Maps and turned it into a friendly competition among the four groups. This activity sparked excitement and enthusiasm among the students. Group X2 stood out, exhibiting excellent teamwork and cooperation, resulting in a highly successful game. *Reflection*

The writer observed positive outcomes during the second cycle. Firstly, there was a noticeable improvement in the students' writing skills. The four indicators—organizing ideas, developing content, using correct grammar, and vocabulary all displayed progress as anticipated by the writer. Secondly, the students' motivation levels increased, leading to greater engagement and active participation in writing classes. This change could be attributed to the introduction of Concept Maps, which incorporated visual elements such as colours, images, and branches, effectively capturing students' attention and guiding them through the writing process, thus making it easier for them to accomplish their tasks. Furthermore, the classroom environment during the writing process became more conducive compared to before. The students demonstrated attentiveness and a cooperative attitude, creating a positive learning atmosphere.

In the end of the second cycle, the students's average score who passed the minimum mastery criteterion Around 85% of the total 20 students. The graph below depicts the progression of average scores for decriptive wrting among the students, from the preliminary study through cycle 1 and cycle 2.

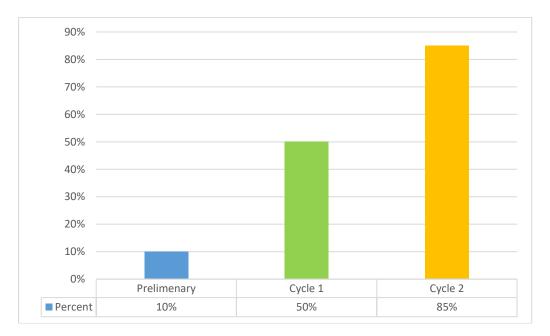


Figure 3. Displays the average scores achieved by the students in their descriptive writing assignments.

Discussion

The research findings indicate that the incorporation of the mind mapping strategy has yielded positive effects on enhancing the students' proficiency in writing descriptive texts. While not all students reached the maximum level of proficiency, a majority of the participants demonstrated noticeable improvement in their writing skills, as evidenced by the assessment results obtained during both the cycle and post-test stages. The implementation of the mind-mapping technique yielded favorable outcomes in terms of enhancing descriptive

writing abilities. Furthermore, the students expressed their interest in and appreciation for this technique, finding it easier to compose descriptive texts using the mind-mapping approach.

They exhibited increased motivation and confidence in their writing endeavors. These positive responses from the students highlight the effectiveness of the mind-mapping strategy in supporting their learning and engagement in descriptive writing tasks (Al-Zyoud et al., 2017; Batdi, 2015). During Cycle I, it was observed that approximately 27% of the students successfully completed the activity, which falls within the "good" category of performance. This indicates a significant proportion of students demonstrating competence in applying the mind-mapping technique to their writing tasks. Due to this, the utilization of the mind mapping strategy in the teaching of descriptive writing has proven beneficial in enhancing students' proficiency (Davies, 2011; Fesel et al., 2016). The majority of participants showed improvement in their writing skills, expressing interest, motivation, and confidence in their ability to compose descriptive texts. The findings support the effectiveness of the mind-mapping technique in facilitating the development of descriptive writing abilities among students.

The findings from the Post-test revealed a substantial increase in the average percentage of students who successfully completed the activity, reaching 85% and classified as the "very good" category. These activities specifically focused on the procedural aspects involved in writing a descriptive text. The implementation of the mind mapping technique, guided by appropriate model procedures provided by the lecturer, effectively enhanced the students' writing skills. The incorporation of various stages within the mind-mapping approach facilitated the writing activity, enabling students to develop their descriptive writing abilities (Lin, 2019; Wahid & Sudirman, 2023). In light of these results, it can be concluded that the researchers successfully demonstrated the efficacy of the mind-mapping technique in enhancing students' writing abilities in the context of descriptive texts.

The use of mind mapping as a teaching method effectively addressed the research problem of improving students' skills in writing descriptive texts (Wahid & Sudirman, 2023). Furthermore, the students responded positively to the implementation of the mind-mapping method for teaching descriptive writing, indicating their engagement and appreciation of this instructional approach. This positive response from the students aligns with the observed improvement in their scores, further supporting the enhancement of their writing abilities in the realm of descriptive texts. Overall, the research findings substantiate the effectiveness of the mind-mapping technique in facilitating the development of students' writing skills (Lin, 2019). The significant increase in the percentage of students successfully completing the writing activity, coupled with their positive responses and improved scores, validates the benefits of utilizing mind mapping as a pedagogical approach for enhancing students' proficiency in writing descriptive texts.

The implementation of the mind mapping technique in writing skills has proven to be a motivational factor for students, actively engaging them in the teaching and learning process. Students were able to contribute their existing information, knowledge, and experiences to generate and develop ideas and concepts related to the topic. This aligns with the perspective of Buzan as cited in Khoirah (2014), where mind mapping is described as a graphic organizer with major categories branching out from a central idea, and subcategories represented as branches of larger branches. It serves as a visual tool for generating ideas, notetaking, organizing thoughts, and developing concepts. Furthermore, the utilization of mind mapping during the writing stage allowed students to generate and develop ideas and information, visually representing meaningful relationships in a map format. Once the words and ideas were generated and organized, they were grouped into respective categories, facilitating the easy and comprehensive development of ideas. As a prewriting technique, mind mapping serves as a valuable tool for enhancing vocabulary development. It aids students in building background knowledge, brainstorming, and generating words and ideas related to the topic. Based on the findings, it can be concluded that the implementation of the mind-mapping technique has the potential to enhance students' writing achievement. The results obtained from this classroom action research, conducted over two cycles, provide evidence that the application of the mind mapping technique effectively improves students' writing skills.

CONCLUSION

The successful implementation of the two cycles highlights the significance of acquiring knowledge in a specific field or subject to activate students' prior knowledge. Additionally, mind mapping serves as a valuable writing technique, particularly beneficial for students who face challenges with the fundamental structures of language. Furthermore, this approach offers practical solutions to address complaints related to a lack of ideas and vocabulary. Ultimately, incorporating mind mapping sessions into composition writing makes the process more dynamic and exciting, adding a sense of liveliness and adventure for students. Based on the findings, it can be concluded that during Cycle I, only 3 students of 20 students who exceeded the Minimum Mastery Criterion (KKM) of 7.0 or around 27% of the students were able to successfully complete the activity, which falls into the "good" category. However, in the Post-test, there was a significant improvement, with the average percentage of students successfully completing the activity increased to 85%. This improvement categorizes the students' performance as "very good." A positive outcome observed was that the class environment became less disruptive and more dynamic and enjoyable. Moreover, the collaboration and cooperation among students were enhanced as they engaged in a mutual process of sharing ideas and collectively addressing their own mistakes or imperfections during discussions.

REFERENCES

- Al- Zyoud, A., Al Jamal, D., & Baniabdelrahman, A. (2017). Mind Mapping and Students' Writing Performance. Arab World English Journal, 8(4), 280–291. <u>https://doi.org/10.24093/awej/vol8no4.19</u>
- Al-Shaer, I. M. (2014). Employing Concept Mapping as a Pre-Writing Strategy to Help EFL Learners Better Generate Argumentative Compositions. *International Journal for the Scholarship of Teaching and Learning*, 8(2), n2.
- Astiantih, S., & Sofyan, W. N. P. (2022). Improving Reading Comprehension by using Experience Text Relationship (ETR). Journal. ELS journal of Interdisiplinary Studies in Humanities, Vol.5, No.2. <u>https://doi.org/10.34050/elsjish.v5i2.21150</u>
- Batdi, V. (2015). A Meta-analysis Study of Mind Mapping Techniques and Traditional Learning Methods. *The Anthropologist*, 20(1–2), 62–68. <u>https://doi.org/10.1080/09720073.2015.11891724</u>
- Boyson, G. (2009). The use of mind mapping in teaching and learning. *The Learning Institute, Assignment*, 3(8), 123-145.
- Buzan, T., & Buzan, B. (1994). The Mind Map Book: Available from Ama zon. comShared Visions Unlimited Reviews Home PageHow to Use Radiant Thinking to Maximize Your Brain's Untapped Potential. E. P. Dutton.
- Buzan, T. Barry, 1993. The Mind Map Book: How To Use Radiant Thinking to Maximize Your Brain's Untapped Potential. E-book.
- Davies, M. (2011). Concept mapping, mind mapping and argument mapping: What are the differences and do they matter? *Higher Education*, 62(3), 279–301. https://doi.org/10.1007/s10734-010-9387-6

- D'Antoni, A. V., & Zipp, G. P. (2006). Applications of the mind map learning technique in chiropractic education: A pilot study and literature review. *Journal of Chiropractic Humanities*, 13, 2-11.
- D'Antoni, A. V., Zipp, G. P., Olson, V. G., & Cahill, T. F. (2010). Does the mind map learning strategy facilitate information retrieval and critical thinking in medical students?. *BMC medical education*, 10, 1-11.
- Fadli, K., Irawan, L. A., & Haerazi, H. (2022). English Teachers' Feedback on Students' Writing Work in the New Normal Era: Teachers' Feedback; Writing Skills. *Journal of Language and Literature Studies*, 1(2), 83–92. <u>https://doi.org/10.36312/jolls.v1i2.624</u>
- Fahim, M. & Rahimi, A. H. (2011). The effect of concept mapping strategy on the writing performance of EFL learners. Journal of Academic and Applied Studies, 7(5), 357-360.
- Fatiani, T. A., Rahman, A., & Jupri, J. (2021). Practicing Cooperative Learning Model Using Picture Cube and Story Marker to Improve Writing Skills. *Journal of Language and Literature Studies*, 1(1), 29–40. <u>https://doi.org/10.36312/jolls.v1i1.500</u>
- Fesel, S. S., Segers, E., de Leeuw, L., & Verhoeven, L. (2016). Strategy training and mindmapping facilitates children's hypertext comprehension. Written Language & Literacy, 19(2), 131–156. <u>https://doi.org/10.1075/wll.19.2.01fes</u>
- Goodnough, K., & Long, R. (2002). Mind Mapping: A Graphic Organizer for the Pedagogical Toolbox. *Science Scope*, 25(8), 20-24.
- Haerazi, H., & Kazemian, M. (2021). Self-Regulated Writing Strategy as a Moderator of Metacognitive Control in Improving Prospective Teachers' Writing Skills. *Journal of Language and Literature Studies*, 1(1), 1–14. <u>https://doi.org/10.36312/jolls.v1i1.498</u>
- Jacobs, H. L. (1981). Testing ESL Composition: A Practical Approach. English Composition Program. Newbury House Publishers, Inc., Rowley, MA 01969.
- Jaya, C. (2013). *The Power of Concept Mapping to Improve Reading Comprehension*. International Journal of Education (IJED). Vol 1, No 2 (2013).
- Kazemian, M., Irawan, L. A., & Haerazi, H. (2021). Developing Metacognitive Writing Strategy to Enhance Writing Skills Viewed from Prospective Teachers' Critical Thinking Skills. *Journal of Language and Literature Studies*, 1(1), 15–28. <u>https://doi.org/10.36312/jolls.v1i1.499</u>
- Khoiriyah, K. (2014). Increasing the Students' Writing Skill through Mind Mapping Technique. Nusantara of Research: Jurnal Hasil-Hasil Penelitian Universitas Nusantara PGRI Kediri, 1(2).
- Kurniati, E., & Kusumastuti, D. (2019). Concept map strategy to organize ideas in writing exposition text. *Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP*, 6(1), 25-34.
- Lin, C.-J. (2019). An online peer assessment approach to supporting mind-mapping flipped learning activities for college English writing courses. *Journal of Computers in Education*, 6(3), 385–415. <u>https://doi.org/10.1007/s40692-019-00144-6</u>
- Novak, J. D., & Cañas, A. J. (2006). The theory underlying concept maps and how to construct them. *Florida Institute for Human and Machine Cognition*, 1(1), 1-31.
- Novak, J. D., & Gowin, D. B. (1984). Learning how to learn. cambridge University press.
- Miller, D. M., Scott, C. E., & McTigue, E. M. (2018). Writing in the secondary-level disciplines: A systematic review of context, cognition, and content. *Educational Psychology Review*, 30, 83-120.
- Mills, G. E. (2006). Guide for the teacher researcher. New Jersey: Prentice Hall. Retrieved March, 17, 2017.

- Mohamed, W. A. W., & Omar, B. (2008). Using Concept Map to Facilitate Writing Assignment in Concept Mapping: Connecting Educators Proc. of the Third Int. Conference on Concept Mapping. Tallinn, Estonia & Helsinki, Finland.
- Mulyasa, H. E. 2009. Praktik Penelitian Tindak Kelas, Bandung: PT Remaja Rosdakarya.
- Rubiyah, R., Ping, M. T., & Syamdianita, S. (2018). Implementing Concept Mapping Technique to Improve Students Descriptive Writing Ability. *LLT Journal: A Journal on Language and Language Teaching*, 21(1), 65-74.
- Rubiyah. (2014). Implementing concept mapping technique to improve the students'ability of writing descriptive composition of the seventh graders at SMP Negeri 21 Samarinda. (Unpublished Thesis, Mulawarman University, 2014).
- Siahaan, Sanggam. (2008). The English Paragraph. Yogyakarta: Graha Ilmu.
- Toi, H. (2009, June). Research on how mind map improves memory. In International Conference on Thinking, Kuala Lumpur, 22nd to 26th June.
- Villalon, J., & Calvo, R. A. (2011). Concept maps as cognitive visualizations of writing assignments. *Journal of Educational Technology & Society*, 14(3), 16-27.
- Wahid, J. H., & Sudirman, S. (2023). The Effect of Mind Mapping Technique on Students' Writing Skills. Journal of Languages and Language Teaching, 11(1), 39. <u>https://doi.org/10.33394/jollt.v11i1.6692</u>
- White, A., Moon, B., Hoffman, R., Novak, J., & Canas, A. (2011). The use of concept mapping in ecological management: A case study involving grassland ecosystems in Victoria, Australia. *Applied concept mapping: Capturing, analyzing, and organizing* knowledge. CRC Press, Boca Raton, FL, 151-167.