

The Enhancement of Writing Skill and Critical Thinking through Digital Visual Mind Mapping in Writing Classroom

Khafifah Indar Parawansa S¹, Moh. Hafidz²

STKIP PGRI Bangkalan^{1,2}

*E-mail: khafifahparawansa752@gmail.com

Abstract

This study aims to determine the use, application and effect of digital visual mind mapping method on narrative text learning of MA Al Hidayah Bangkalan students. This research uses a qualitative design. The design used is a qualitative design. The instruments used by researchers are observation, interviews and documentation. The participants in this study were 1 teacher who taught English class XI at MA Al Hidayah Bangkalan. The observation result shows that learning using digital visual mind mapping creates an active, interactive, interesting and fun learning environment because students exchange opinions and build cohesiveness between teams. After conducting an interview with the teacher concerned, it can be seen that the application of the digital visual mind mapping method is very effective and can make students faster in understanding lessons through things that students really like and also motivate students to be more enthusiastic and train students' critical thinking skills. Although there are some students who are still shy and find it difficult due to the lack of vocabulary they have, the digital visual mind mapping method can make them more free to express ideas into writing. The results of the documentation as evidence and digital traces of the application of the method. The findings of this study show that the visual mind mapping method is a method that fits the needs of students today and facilitates students in writing activities and hones students' critical thinking skills.

Keywords: writing skill, critical thinking skill, visual mind mapping



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Introduction

Writing is a skill that has an important role as a place to express thoughts and channel feelings (Cahyono et al., 2022). Writing is one of the vital parts of language skills that is very important to be taught to students. Writing skills also have a significant role in every daily activity, especially anything related to written language. By learning and exploring this skill, students are expected to express ideas and thoughts in writing.

In the teaching and learning process, teachers are expected to provide learning models or techniques that are suitable for students' needs. By using a suitable and appropriate learning model or technique, learning will be more effective and will enhance the quality of learning (Rihayati et al., 2021). With the sophistication of existing technology, more and more new models and techniques are now present to facilitate and increase student motivation and interest in learning. One of them is the use of mind mapping.

Mind mapping are designed to spread the main topic or idea in the center and subtopics near the main topic (Normawati, 2020). This allows you to have an overview and easily see the connection between ideas. Mind mapping can help students' creativity and memory because instead of writing in descriptions, using mind mapping is flexible and allows all related information to be displayed on the

same map. Mind mapping also provide learners with a more interesting and engaging view, which then allows the learner's brain to process it. This makes it easier for learners to remember information because emphasis and relationships are represented by images, symbols and colors. Mind mapping learning helps students understand the subject matter easily and quickly (Hariyadi et al., 2023).

According to Sari (2021), the use of mind maps is proven to enhance learning motivation and critical thinking. With an attractive visual display equipped with unique images and colors will make students more interested in applying it. In fact, without realizing it, it will build students' critical thinking in a fun and unique way. Mind mapping are shaped like maps, which can quickly stimulate students' thinking after reading (Tatipang et al., 2022). Using this mind mapping method makes it easier for students to focus on the topic and the important elements contained in it so that students can get information clearly and validly. In addition, this technique is combined with visual technology from today's application platform. Visual learning makes students understand the material faster because of the various images and color combinations. This strategy is a powerful way to make learning more effective and efficient (Sudarta, 2022).

In addition, to support the learning process, effective tools also need to be chosen carefully. One of the tools that can be used to facilitate learning is digital visual media. The use of digital media makes students more interested and motivated to learn (Pahmi et al., 2022). One of the digital media is the use of the internet for the Canva application. The Canva application provides many features, one of which is mind mapping templates that can be directly edited or can be free to create their own mind mapping designs according to the wishes and creativity of students. In this study, researchers used digital media using Canva Application. Canva is one of the most popular platforms and is often used by students. If we type the keyword "mind mapping" or "mind map", Canva will automatically display a large selection of mind map templates with various and interesting styles. In addition, students can also create their own mind mapping designs according to their creativity. Thus, it can also have an impact on their thinking.

The ability to think critically is an ability that every student is expected to have. By having critical thinking, students are able to make wise and rational decisions, help in finding solutions in problem solving and not easily believe and be contaminated by doctrines or statements that are still unclear. This research focuses on students' writing ability and context mastery. Students are required to think critically in understanding the context and ideas in their writing activity (Karim & Mustapha, 2020) contained in the narrative text by using digital visual mind mapping. Based on the statement above, the writer is interesting to do research in this school by the digital visual mind mapping to enhance writing skill and critical thinking. So, the researcher will conduct a research entitled: "Enhancement of Writing Skill and Critical Thinking through Digital Visual Mind Mapping".

Methods

In order to investigate the case study that takes place at MA Al Hidayah, the researcher used qualitative research methodology. According to Creswell (2014) cited by Bustam & Saifullah (2024) said that qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explores a social or human problem, where the researcher builds a complex, holistic picture, analyzes words, reports detailed views of information, and conducts the study in a natural setting. The researcher will conduct research at this location with all students of class XI Cipta as the sample in this study. Students in the class are active and creative students, they actively discuss, ask questions and express opinions during learning. In addition, they also belong to the type of students who use a visual learning style where the strength of learning lies in the sense of sight. They like things that are neat, prioritize the appearance of images and color suitability. Therefore, to support the teaching and learning process that suits the needs and interests of students, teachers use digital visual mind mapping which is one of the methods applied in the school. Thus, the purpose of this study is that the researcher wants to know how the application of digital visual mind mapping

method and the reasons behind the teacher in the enhancement of writing and critical thinking through digital visual mind mapping.

Results and Discussions

1. Results

In this section, the researcher will provide data that has been collected from the result of observation, interview and documentation during the research. The research explains these points in the following section:

a. Observation

Observation was conducted during the learning process that implemented the digital visual mind mapping method. During the implementation session, students were directed to determine the characteristics of the selected narrative text using digital visual mind mapping through Canva application. The researcher recorded the following findings:

1) Student engagement

By using digital visual mind mapping method, most students showed their active engagement during the learning, especially when they discussed with their teammates. The application of digital visual mind mapping method using Canva application is a method that creates an interesting, fun and practical atmosphere for students. This can be seen from the enthusiasm and feedback shown by students when creating mind mapping. They are more focused and quicker in understanding the context of the text read. In addition, this method also fosters great interest for students in identifying the characteristics of narrative texts.

2) Enhance Delivery Ability and Critical Thinking

The results of observations during the observation session showed an increase in students' ability to understand the context easily and more quickly so that students became more confident and enthusiastic when presenting their mind mapping results. This can be seen in terms of delivery which becomes more effective (Aulia, 2025). This digital visual mind mapping method gives them a kind of picture and steps so that they can present it well in front of the class. This is supported by previous research which shows that the use of mind mapping has helped students in enhancing students' critical thinking skills (Wafa' A & Moath Khalaf, 2023).

b. Interview

After conducting an interview with an English teacher who has used the digital visual mind mapping method, it can be seen that:

- 1) Teachers find it helpful in the teaching and learning process, especially in explaining material concepts and contexts in stories.
- 2) Students are more enthusiastic and more excited in writing by using this digital-based method.
- 3) Since this method was implemented, students who were initially shy about expressing ideas and confused about the context, making it difficult to put them into writing, have now made significant progress.
- 4) The teacher said that there were no significant obstacles in applying the method.

c. Documentation

Documentation in this study was obtained in the form of photographs using a cellphone during the application of the digital visual mind mapping method.



Picture 1. Students start making mind mapping



Picture 2. Discussion and presentation preparation

2. Discussions

a. Steps of Digital Visual Mind Mapping Technique

The steps of making a mind map practically of course by using an application. There are many digital applications for making a mind map as for the stages or steps for making a mind mapping. One of them is Canva application. There are the steps of digital visual mind mapping that modified from Tony Busan's book cited by Ummah (2019).

- 1) Starting from searching for the desired mind mapping template by typing the keyword "mind mapping" in the Canva application.
- 2) Edit the selected template by modifying, adding or removing items.
- 3) Delete the default text then type the text or idea that we want to make in the box. Type the narrative title of the text in the centered box.
- 4) Add boxes, lines, branches or symbols as needed.
- 5) Save using pdf or png format.

b. The Use of Digital Visual Mind Mapping to Enhance Writing and Critical Thinking Skills

Digital Visual Mind Mapping is one of the media used to enhance students' writing and critical thinking skills. This media is a suitable and effective media to enhance students' writing and critical thinking skills. Its technology-based use facilitates students in their writing activities, especially this media helps students visualize their ideas. Besides, the use of Digital Visual Mind Mapping is also designed as practical as possible so that it allows teaching and learning activities in the classroom to be more efficient. Modified from Nurhayati (2022), the stages of using Digital Visual Mind Mapping in English learning to enhance writing and critical thinking skills are divided into 3 steps:

- 1) Pre-writing activities
In this preparation stage the teacher divides the students into groups of 6-7 people.
- 2) While-reading activities
In this preparation stage includes:
Each group will be given 1 topic in the form of narrative text with various titles and instruct them to read it carefully. In the text the teacher also provides visual images to attract students' reading interest and provide an initial overview of the story text to be read. The teacher explains digital visual mind mapping and how to use and practice it with the keyword characteristics of the narrative text that has been selected as a reference to fill in the mind mapping branch points. The teacher gives time for everyone to discuss and cooperate with each other to come up with their ideas by using digital visual mind mapping. The whole group performs writing activities using mind mapping, each member taking turns to fill in the branches or columns in their the mind mapping.
- 3) Post-writing activities
To end the learning, each group will present the results of their digital visual mind mapping that has been printed out in front of the class.

Conclusion

The digital visual mind mapping method is a method designed to make the teaching and learning process active and emphasizes the use of mind maps with one of the digital applications so that it helps students in understanding the context in writing and critical thinking skills.

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