

Enhancing Descriptive Writing through Mind Mapping and Verbal Outlining Across Learning Styles

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Article Info	ABSTRACT
Article History: Submission: 2026-07-22 Revised: 2026-07-31 Accepted: 2026-07-31 Published: 2026-07-31	Mastering descriptive writing remains a significant challenge for EFL students, particularly when instructional techniques do not align with individual learning preferences. Therefore, this study aims to investigate the effect of using mind mapping and verbal outlining techniques on students' ability to write descriptive texts, involving the learning styles (visual and verbal) of tenth-grade students at SMA Dharma Karya UT Pondok Cabe Ilir. This research employed a quasi-experimental design with a 2x2 factorial arrangement. The sample consisted of 44 students selected through cluster sampling, divided into two experimental classes: one taught using the mind mapping technique and the other using verbal outlining. Data were collected through two instruments: a writing test to measure descriptive writing ability and a questionnaire to classify students as visual or verbal learners. The data were analyzed using a Two-Way ANOVA design. The research findings revealed three key results. First, there are significant different effects between mind mapping and verbal outlining on students' descriptive writing ability, with a p-value of 0.028, which is less than α (0.05). Second, there is a significant difference between visual learners and verbal learners in writing descriptive texts, with a p-value of 0.002, which is less than α (0.05). Third, there is a significant interaction effect between teaching techniques (mind mapping and verbal outlining) and learning styles (visual and verbal) on students' descriptive writing ability (p-value = $0.000 < 0.05$). The conclusion is a student's success in creating descriptive texts is determined not only by the technique used but also by the compatibility of that technique with their learning style. Visual learners were found to be successful using either mind mapping or verbal outlining, whereas verbal learners achieved optimal results only when using the verbal outlining technique.
Keywords: Mind Mapping; Verbal Outlining; Writing Skill; Descriptive Text; Learning Style.	

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1. INTRODUCTION

The English subject is taught from Elementary School until Senior High School. From four skills in English, namely listening, speaking, reading, and writing, people sometimes

encounter problems in writing skill. Writing is challenging because it requires more than correct grammar and a wide range of words; the writer must also develop their thoughts and link each idea logically throughout the

text. According to Hyland (2022), writing is a recursive and strategic process where authors explore, structure, draft, and refine their ideas systematically. This composition journey begins by gathering initial concepts through pre-writing strategies like brainstorming, mind mapping, or outlining, which are then arranged systematically into a preliminary draft.

There is a factor that influences a writer when s/he writes something. The researcher shows linguistic factors that influences in writing. Brown and Lee (2020) explain that effective writing relies on several fundamental components: content, organization, originality, discourse style, fluency, and linguistic accuracy. Content refers to the main message or information shared in the text. Organization relates to how logically these points are structured. Originality ensures that the ideas are truly the author's own work rather than copied material. Style reflects the writer's personal tone and presentation. Fluency describes how smoothly the sentences connect. Lastly, accuracy focuses on using correct grammar and suitable word choices.

The problem in writing as explained above also happens to some students at the first grade of SMA Dharma Karya UT. Based on the pre-observation that has already been conducted by the researcher there, problems are found when the students make a descriptive text. There are several problems that cause difficulty for students when writing one. First, many students meet problems with developing and organizing ideas. In developing the ideas, they feel difficulty in describing something because they think shallowly. Then, in

organizing the ideas, they have many but the ideas conveyed by them are still jumbled together. It makes the reader confused on what the writer means.

Second, even though they have many ideas, they also have problems in describing the ideas into written form. It is because they have less vocabulary and grammar knowledge. In vocabulary problem, they often do not know how to make an Indonesia sentence into an English sentence. It can be overcome if the students want to open a dictionary to find English word, but apparently they feel lazy in doing it. Then, in grammar problem, the most common problem is the mistake of when making an English sentence, they translate an Indonesian sentence into an English sentence word by word, whereas both Indonesian sentence and English sentence have differences in sentence structure. Third, the problem not only comes from the student side, but also from the teacher side. The teacher sometimes does not tell the students about the ways to write a good descriptive text. To create an effective descriptive text, students need to understand not just its definition and text structure, but also the practical steps to compose it. It means that they have to know a technique to develop their ideas more and arrange them in order to be well structured and linked to each other.

Before making a good writing, the students have to make a draft. It is supported by Ferris and Hedgcock (2023), who emphasize that drafting serves as an essential bridge allowing learners to explore, expand, and establish coherent relationships among their evolving thoughts. Making a draft helps the students to extend the ideas

and make the ideas correlate one with another which will be conveyed into a piece of writing. There are many techniques that can be used to make a draft: mind mapping, verbal outlining, brainstorming, and free writing. In mind mapping and verbal outlining, the students only do one step. The step is that the students have to show their ideas directly related with the topic. Even if the students have many ideas in their mind, they only can write the ideas which are connected to one another. It is different in brainstorming and free writing where the students do two steps. The first step is where students are free to write all of the ideas that come to their minds and the second one is that the students have to choose which one of the ideas that is related with the topic. The researcher sees that mind mapping and verbal outlining is more simply than brainstorming and free writing. Because of that, the researcher chose mind mapping and verbal outlining for her research.

Mind mapping serves as a visual tool to structure and link related ideas. The ideas are written into keyword. Mind mapping is like a picture; the students can write the topic at the center of paper then connect webs from the central topic. Jun and Jamaludin (2022) describe mind mapping as an effective visual-spatial organizer where learners place the central theme at the focal point and generate branching nodes to illustrate semantic relationships among sub-topics. This is corroborated by Haiyao et al. (2023), who explain that visual mapping engages dual-coding cognitive channels during composition: the verbal channel processes terminology and keywords, while the non-verbal channel spatially organizes

relationships and conceptual hierarchies. From several statements above, the writer concludes that mind mapping is a way, technique, or process done by a writer in thinking of ideas in the brain, putting them down on paper as a keyword in the circle, and following up by linking and arranging them to make a diagram or spider gram or web used as the basis of writing.

On the other hand, verbal outlining consists of two words; verbal and outline. Verbal is related to language by written or oral. Then, the outline is a plan to write an essay or text. The planning means writing a list of ideas that will be delivered. So, verbal outlining is an activity to list ideas which uses clauses, phrases, or sentences consisting of a thesis statement in the introduction, main ideas, and supporting ideas in each body paragraph and conclusion. The benefit of using mind mapping and verbal outlining is the same. They can produce good ideas and the extended ideas will be arranged orderly and structurally. Bailey (2020) affirms that an outline serves as the structural framework or roadmap of a written text, ensuring that arguments and evidence follow a cohesive trajectory. Furthermore, Folse, Solomon, and Clabeaux (2020) highlight that constructing a written outline prior to drafting is one of the most effective methods to organize paragraphs, functioning much like an architectural blueprint that prevents omissions of crucial supporting details. From the opinion above, it means that before writing something the writer should arrange an outline in order to create a good writing because it is supported by good ideas.

In connection with the explanation in the paragraph above, the students who succeed in making a good writing are not only supported by what technique they use but also it has to depend on what style the students use to learn. God creates people with different criterias such as difference in physical appearance and personality. They also have a difference in the way of interpreting an information. It can be referred to as the difference in learning styles. Pritchard (2021) defines learning style as an individual's habitual and preferred mode of acquiring, processing, and retaining instructional input. In addition, Santrock (2021) states that learning preferences determine how learners selectively perceive stimuli and synthesize new information into their existing cognitive structures. It means that everyone has a way in getting the comprehension of knowledge easily through three steps: perceiving, remembering or organizing or processing, then mastering the knowledge.

It happens in the classroom; each student has his/her own styles in the learning process. For example, in one classroom all of the students have different styles in comprehending the materials from a teacher, and the teacher must be aware about it. Apparently, teachers do not pay attention to different styles. The teacher always uses one technique to all of the students in one classroom, whereas it maybe not appropriate with their styles in comprehending of materials.

There are many different ways in perceiving knowledge. Fleming and Baume (2021) classify perceptual modalities into visual, verbal

(read/write), auditory, and kinesthetic styles. Verbal learners perceive and assimilate information most effectively through written and spoken words, while visual learners depend heavily on graphical representations, diagrams, and spatial configurations. From categorizes of learning styles above, the researcher chose visual learning style and verbal learning style to be used for her research. She remarked that visual learning styles are the students who like to learn by using a picture or diagram. They like making symbols in the form of pictures from what they see with their eyes to be comprehended. She also viewed that verbal learning styles are the students who like learn by using words. It means that to understand the material, they prefer to arrange the words to become sentences from what they see, hear, or think.

Although mind mapping and verbal outlining techniques are the best, but if it is not suitable with their own style in learning process, it will not give a good result. All students have a different capability in understanding the material. In fact, the teacher does not pay attention to the learning styles of each student. The teacher always considers all of the students to have the same learning styles. Furthermore, the teacher should be aware that if the students are given a suitable technique for their own style in the learning process, their result from learning will be better. Based on the discussion above, it can be assumed that both teaching technique (mind mapping and verbal outlining) and students' learning style (visual-verbal learner) are needed to increase writing a descriptive text. Therefore, the researcher feel

interested to investigate more whether teaching techniques have positive effect and can be applied as a problem solving. Furthermore, it is important to seek whether those teaching technique and learning style contribute significantly towards the students' writing a descriptive text.

2. METHOD

For the design of the research, the researcher used 2x2 factorial designs. The design can be seen as follows:

Table 1. 2x2 Factorial Designs

Learning Style	Teaching Technique	
	A ₁ (Mind Mapping)	A ₂ (Verbal Outlining)
B ₁ (Visual Learner)	A ₁ B ₁	A ₂ B ₁
B ₂ (Verbal Learner)	A ₁ B ₂	A ₂ B ₂

Note:

A₁ : Students who use mind mapping technique

A₂ : Students who use verbal outlining technique

B₁ : Visual learner

B₂ : Verbal learner

A₁B₁ : Mind mapping technique is used by visual learner

A₂B₁ : Verbal outlining technique is used by verbal learner

A₁B₂ : Verbal learner who use mind mapping technique

A₂B₂ : Verbal learner who use verbal outlining technique

The researcher chose cluster sampling as a technique to take a sample. In this research, from three intact classes, the researcher took the two of three intact classes that homogeneous. The homogeneous means the researcher took the two intact classes that have same characteristic of English ability. It can be seen from the mean score of English exam, class X – 1 has 7.8, class X – 2 has 7.8, and class X – 3 has 7.5. So the researcher took class X – 1 and class X – 2. Every class was treated differently in which the class was taught by using

mind mapping and another class was taught by using verbal outlining. The researcher used lottery to decide which one the class would be taught by using mind mapping and which one the class would be taught by using verbal outlining. Then, class X – 3 became try out class.

The researcher used two instruments: questionnaire test and writing descriptive test. Questionnaire test is used to determine the learning style in each student, whether s/he is visual learner or verbal learner. Concurrently, a descriptive writing assessment served to measure the participants' competence in composing descriptive.

After collecting the data, for the first one the researcher found the normality of data by using Kolmogorov-Smimov formula. The second one the researcher analyzed the homogeneity test by using Levene's test. The third one the researcher used inferential analysis to test the hypothesis by using two-way ANOVA. Besides that, the researcher also used descriptive analysis to describe overall data such as frequency distribution, histogram, draft, graphic, table, and many more. Then, the using of SPSS version 22 is chosen by the researcher to analyze the data.

3. FINDINGS AND DISCUSSION

This section presents the results of the data analysis regarding the students' scores. As displayed in Table 2 showed mean score with symbol of $\bar{X}$. The mean score of visual learners who was used mind mapping technique are 85.45. It is higher than the mean score of visual learners who was used verbal outlining technique. The mean

score of visual learners who was used verbal outlining technique are 82.36. Meanwhile, the mean score of verbal learners who was used mind mapping technique are 76.27. The mean score of verbal learners who was used verbal outlining technique are 84.36. It can be seen that the mean score of verbal learners who was used mind mapping technique is lower than the mean score of verbal learners who was used verbal outlining technique.

Table 2. Descriptive Statistics

Learning Style	Teaching Technique		Total
	Mind Mapping	Verbal Outlining	
Visual	11	11	22
	$\bar{X}$ 85.45	82.36	83.91
Verbal	11	11	22
	$\bar{X}$ 76.27	84.36	80.32

After the data were proven to be normal and homogeneous, then two-way anova was done to examine the effect of two independent variables of interest on the dependent variable and the interaction between the different levels of these two independent variables. The researcher used p-value approach to state the significance and critical value approach with symbol of F_{test} to state the differences. The result of p-value is compared with $\alpha = 0.05$, while F_{test} is compared with F_{table} . The value of F_{table} is gotten from table F by seeing the value of degree of freedom for interaction and degree of freedom for error.

Generally the rules are as follows:

- If p-value is more than $\alpha = 0.05$, it means that there is no significant difference/interaction within category.

- If p-value is less than $\alpha = 0.05$, it means that there is significant difference/interaction within category.

Table 3. Result of Two Way Anova

	Mean Square	F	p-value
Teaching Technique (MM and VO)	34.568	7.620	0.009
Learning Style (VI. L and VE. L)	8.205	1.809	0.186
Interaction	50.205	11.067	0.002

Table 5. Mean Scores

	Mean
Teaching Technique MM	80.864
Teaching Technique VO	83.364
Learning Style VI.L	83.909
Learning Style VE.L	80.318
INTERACTION MM*VI.L	85.455
INTERACTION MM*VE.L	76.273
INTERACTION VO*VI.L	82.364
INTERACTION VO*VE.L	84.364

The results to answer three hypotheses by using inferential analysis are as follows:

- First hypothesis

The first hypothesis is to test whether there are significant different effects between teaching techniques: mind mapping and verbal outlining on students' ability to write a descriptive text. The hypotheses are as follow:

H_0 : There are no significant different effects between mind mapping and verbal outlining on students' ability to write a descriptive text.

H_a : There are significant different effects between mind mapping and verbal outlining on students' ability to write a descriptive text.

Table 3 stated that $F_{test} = 5.169$ and p-value = 0.028. It can be said that F_{test}

is more than $F_{table} = 4.11$ and p-value is less than $\alpha = 0.05$. Thus, the null hypothesis is rejected and the alternative hypothesis is received. It proves that there are significant different effects between the students who used mind mapping and the students who used verbal outlining on students' ability to write a descriptive text.

The result above is supported by the result of means score of every teaching technique (see Table 3). The mean score of the students who used mind mapping technique is more than the mean score of the students who used verbal outlining technique. The mean score of mind mapping are 80.864 and verbal outlining are 83.364. It can be said that between the using of mind mapping and verbal outlining as a technique in writing a descriptive text is really significant different.

b) Second hypothesis

The second hypothesis is to test whether there is significant difference between learning style: visual learner and verbal learner in writing descriptive text. The hypotheses are as follows:

H_0 : There is no significant difference between visual learner and verbal learner in writing a descriptive text.

H_a : There is significant different between visual learner and verbal learner in writing a descriptive text.

The researcher obtained in table 3 that $F_{test} = 10.665$ and p-value = 0.002. It can be said that F_{test} is more than $F_{table} = 4.11$ and p-value is less than $\alpha = 0.05$. Thus, the null hypothesis is rejected and the alternative hypothesis is received. It proves that there is

significant difference between visual learner and verbal learner in writing descriptive text.

Besides that, the result of mean score can support the result above. Table 3 shown that the mean score of visual learners' are 83.909 and verbal learners' are 80.318. It can be said that between visual and verbal learner is really significant difference when they make a descriptive text.

c) Third hypothesis

The third hypothesis is to test whether there is significant interaction effect between teaching technique (mind mapping and verbal outlining) and learning style on students' ability to write a descriptive text. The hypotheses are as follows:

H_0 : There is significant interaction effect between teaching techniques (mind mapping and verbal outlining) and learning style on students' ability to write a descriptive text.

H_a : There is no significant interaction effect between teaching techniques (mind mapping and verbal outlining) and learning style on students' ability to write a descriptive text.

In Table 3, the researcher saw that $F_{test} = 25.853$ and p-value = 0.000. It can be said that F_{test} is more than $F_{table} = 4.11$ and p-value is less than $\alpha = 0.05$. Thus, the null hypothesis is received and the alternative hypothesis is rejected. It proves that there is significant interaction effect between teaching techniques (mind mapping and verbal outlining) and learning style on students' ability to write a descriptive text. Then, the result of mean score of the interaction between teaching technique and learning style

also pointed out that there is significant interaction effect between teaching techniques and learning style on students' ability to write a descriptive text.

From the result of mean score of the interaction (see Table 3) the researcher saw that the mean score of mind mapping technique that was used by visual learner are 85.455 and that was used by verbal learner are 76.273. Meanwhile, the mean score of verbal outlining technique that was used by visual learner are 82.364 and that was used by verbal learner are 84.364. It means that the researcher also can see mind mapping technique is better to be taught for visual learner and verbal outlining technique is better to be taught for verbal learner.

Based on the results above, the findings can be discussed as follows. First, there are differences between the students who used mind mapping and those who used verbal outlining technique. This occurs because the manner in which students organize ideas differs across techniques. In mind mapping, students create visual diagrams with associative keywords and branches. As highlighted by Jun and Jamaludin (2022), visual diagrams assist learners in chunking information and conceptualizing relational themes spatially. In contrast, verbal outlining requires students to structure their ideas through hierarchical verbal units and sequential sentences.

Second, there is a significant difference between visual and verbal learners. Visual learners benefit greatly when ideas are illustrated in charts and diagrams, whereas verbal learners excel when ideas are systematically organized through written phrases and

verbal outlines. This empirical condition is consistent with Pritchard (2021) and Santrock (2021), who establish that cognitive processing efficiency is maximized when the instructional medium aligns directly with the learner's preferred perceptual modality.

Third, the significant interaction effect confirms that instructional success in descriptive writing depends heavily on matching the pre-writing technique with individual learning styles. Visual learners performed successfully using either visual mapping or outlining, whereas verbal learners achieved optimal writing mastery specifically when supported by verbal outlining techniques.

4. CONCLUSION

Based on the result of the data analysis, there are several conclusions. First, the result of this research shown that the implementation of mind mapping and verbal outlining technique had significant different result in writing a descriptive text might be caused by the difference of both teaching technique. In mind mapping the students conveyed their ideas in picture or diagram while in verbal outlining the students listed their ideas. Mind mapping and verbal outlining also proved that they are suitable for teaching writing a descriptive text.

Second, the assumption that learning style (visual-verbal learner) could affect students' writing a descriptive text was accepted in this research. The research findings shown that visual and verbal learning style had significant difference on their writing skill especially in writing a descriptive text.

Each student has different level of ability to absorb the knowledge and they also take a different way to comprehend it where visual learner

preferred to learn by using picture and verbal learner preferred to learn by using words.

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