

## PROMOTING THE JUNIOR HIGH SCHOOL STUDENTS' VOCABULARY KNOWLEDGE THROUGH SEMANTIC MAPPING STRATEGY IN WRITING SKILL

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### ABSTRACT

*The study investigated how teacher encouraged junior high school student's vocabulary knowledge by using semantic maps on writing skills and examined what vocabulary knowledge could be promoted by semantic mapping through students' report text writing. This study used a qualitative method, with the research participants being 35 students of SMPN 28 Surabaya consisting of 17 boys and 18 girls. The instruments used in this study were field notes and students' report text writing. Field note was used to find out how the teacher implemented semantic mapping to encourage students' vocabulary knowledge in writing skill. At the same time, Student writing was used to answer how students' vocabulary knowledge is in the report text and what vocabulary knowledge was promoted by semantic mapping. The outcome of this study showed that the teacher implemented semantic mapping through several stages, such as introducing brainstorming, categorizing, personalizing, and writing. Furthermore, semantic mapping engaged students' attention to always focus on the learning process, assisted them to prepare ideas and information before writing a report text, explored and connected their vocabulary knowledge to the topic. In addition, based on the results of student report text analysis, which was done in groups, semantic mapping helped them to encourage vocabulary knowledge, classified vocabulary according to its categories and facilitated students to use vocabulary according to the context in the report text. Semantic mapping encouraged three students' vocabulary knowledge: word recognition, word grouping, and word context. By having good vocabulary knowledge, students could produce appropriate report text writing.*

**Keyword:** Vocabulary Knowledge, Semantic Mapping, Report Text.

### INTRODUCTION

Vocabulary is one of the essential characteristics of language acquisition and the most crucial aspect of second-language comprehension. The condition of not mastering vocabulary is a challenge for speakers, especially students who need more vocabulary; it will be a challenge for them to understand a reading or to express their thoughts through writing. Thus, students need to have a good understanding and

mastery of vocabulary. One of the crucial contributors to language skills is vocabulary knowledge which is comprehensively needed to know students' foreign language skills (Simanjuntak & Simanjuntak 2018). By mastering sufficient vocabulary, students can express their thinking well in written and verbal form. The more they write and read in English, the more they will comprehend the vocabulary, and vice versa. Therefore learning vocabulary is inextricable from the

other three skills. Rohmatillah (2015) argues that because vocabulary is related to another part of language, the more a person learns it, the more they can learn to speak, listen and write. However, recalling and memorizing vocabulary is quite challenging for students. Learning new words can be challenging for several reasons, including the extent to which they resemble those in the learner's native language (L1), the complexity of the words themselves, their spelling, pronunciation, the number of words they contain, their ability to be combined into phrases, and their frequent and varied application ( Liu 2018). Thus, the teacher should be innovative in establishing a comfortable, appealing, and engaging learning environment to keep students engaged. Therefore, the teacher must be able to make students not feel or experience difficulties in learning vocabulary. Students are taught not only to remember the words but also to understand the meaning of words and to generate the term acquired or obtained in writing and orally. Additionally, Nation (2001: 4) reveals that vocabulary learning is a cumulative process that must be taught, learnt, and used on purpose for some fundamental reasons. There are some steps or ways that students need to learn vocabulary; They must first consider the terms in context to comprehend and

gradually increase their vocabulary. Second, teachers present various word usage examples to assist students in understanding how to use the same word in a different context. Third, kids frequently forget new vocabulary within twenty-four hours of learning it; consequently, teachers must reinforce earlier vocabulary acquisition activities. Therefore, the teacher should comprehend these factors mindfully.

In light of the abovementioned issues, semantic mapping is one of the adequate vocabulary teaching strategies. The use of semantic mapping enhances a student's vocabulary knowledge. According to Maggard (2000) semantic mapping has been employed in a variety of methods, including strengthening the student's vocabulary, enhancing reading comprehension, supporting the student in retaining things or words in order, and utilizing a framework to discover the text's hierarchical groups. Anditasari (2022) explains that semantic mapping is a visual approach to expanding vocabulary by showing similar terms in categories. Hence, the semantic mapping will aid students in acquiring language, as learning vocabulary involves word memorization and comprehension.

Implementing semantic mapping strategies in the classroom has increased students' vocabulary retention and recall

(Sopian, 2019) and it prompts students to consider the connections between words (Grave, 2008). It encourages their ability to engage in curiosity regarding word relationships, leading students to a deeper comprehension of words and how they are used in various contexts. Vocabulary is another area where students can improve and flourish. By connecting a new term to other words or phrases with a similar meaning, students can better grasp the notion behind the word through semantic mapping. To better communicate ideas, semantic mapping is used to draw lines between concepts and the terms that describe them. Students are prompted to demonstrate their comprehension of the material by classifying its vocabulary.

Several previous studies reveal that semantic mapping is a strategy in vocabulary development (Udaya, 2022 ; Akil & Rosids ,2018; Fernando; 2021). In her research, Udaya points out that semantic mapping significantly impacts students' reading comprehension more than word lists. The Words from the students' memories can be retrieved via semantic mapping. The prior studies points out that semantic mapping is uses to helps students learn the language and helps students comprehend texts (Udaya, 2022; Fernando; 2021). Moreover, semantic mapping strategy is suitable for the student

in Junior High School because it helps them in overcoming their difficulty in learning vocabulary by visualizing their understanding of words meaning in form of a map, and promotes them to explore vocabulary knowledge (Akil & Rosids 2018). Semantic mapping helps them in recalling and memorizing the words. In short, previous research focused on developing students' vocabulary knowledge through a semantic mapping strategy that helps them to understand a text. Moreover, Jusmaya & Afriana (2019) explore the effectiveness of semantic mapping as prewriting activity in argumentative writing using a quasi-experimental design method. The outcome of this study proves that learning to write argumentatively based on semantic mapping theory has a significant influence on students' argumentative writing skills.

The recent research mostly focuses on developing students' vocabulary knowledge through a semantic mapping strategy that helps them to understand a text in reading activities. Research about promoting vocabulary knowledge through semantic mapping in writing activities is still under-explored (Karim, 2016). Therefore, this research aims to investigate how the implementation of semantic mapping promotes Junior High School vocabulary

knowledge in writing skills. Through semantic mapping, students can produce new sentences contextually. They will write a contextual sentence based on the words that have already existed on the semantic mapping. Thus, semantic mapping can be an outline for students to learn vocabulary and write an essay contextually and systematically. The gap that distinguishes the previous research is this study uses qualitative method to gain and analyses the data and the text that used in this study is report text. Furthermore, the participants of the study are junior high school students.

## **METHOD**

In this study, the researcher investigated the implementation of semantic mapping in promoting Junior High School students' vocabulary knowledge in writing skills. Specifically, the researcher explored how the teacher encouraged students' vocabulary development through semantic mapping strategies on student activities when writing report texts. For the result, the researcher analyzed the students writing that used vocabulary that provided in semantic mapping they had made by using a vocabulary rubric. Therefore, the research used a qualitative method to fulfill the research objectives. The qualitative method is a study method that focuses on

interpretation and descriptions and produces words instead of numbers (Hancock et al., 2009; Patton & Concham, 2022). Creswell (2009) defines qualitative research as examining human and social problems. The whole purpose of qualitative research is to gain an understanding of how people understand their lives, define the process rather than the product and define how people infer what they experience (Merriam & Tisdell, 2016). Thus, this research is very suitable for using a qualitative methodology because it describes how teachers use semantic mapping strategies to help students develop their vocabulary knowledge in writing report texts. This study conducted at SMPN 28 Surabaya in 2023-2024 year of academic, located in Surabaya, East Java, It involved one class of ninth grade consisted of 35 students (17 boys and 18 girls). The research chosen this setting because this school has been using semantic Mapping for the teaching and learning process.

There two instruments were used in this study. Those were field notes and students' vocabulary in report text. Ary et al. (2010) state that qualitative research holds to words that refer to complex behaviors and situations in natural environments. All the activities were noted in the field notes to ensure that the observation was noticed. The

researcher also recorded the learning process using cell phones. Therefore, a recording device is essential to the qualitative researcher's equipment (Fraenkel, 2011). The researcher sat behind the class to write field notes while the cell phone records the interaction happening in the classroom. The students had a writing activity using semantic mapping to promote their vocabulary knowledge to help them create their writing. After that, the researcher got the student's work to be analyzed so the researcher could know the students' vocabulary knowledge after being promoted by semantic mapping.

According to Ary et al. (2010:481), there are several stages in analyzing qualitative data.

#### 1. Organizing and Familiarizing

In this stage, the researcher got familiar with the data collected through reading and re-reading the field notes and the student's report text, which was taken during the learning activity. The researcher also transcribed the recording of learning activity during the implementation of semantic mapping in writing activity and analyzed the student's vocabulary in report text conducted in the second meeting. Then the data obtained was organized by the researcher.

#### 2. Coding and Reducing

The data obtained from the transcription was reduced to obtain primary or essential data information. Since the study was focused on promoting the students' vocabulary knowledge in writing skills through the implementation of a semantic mapping strategy, the unrelated data was excluded from the analyses. After that, the researcher analyzed each part of the word, sentence, and paragraph using the appropriate code. For example, the research used code SM for semantic Mapping, VN for Vocabulary Knowledge, and SV for students' vocabulary. Codes helped the researcher to analyze the data more efficiently.

#### 3. Interpreting and representing

The researcher described all the data obtained from the beginning to the end of the observations. It explained how the teacher implemented the semantic mapping strategy to promote the students' vocabulary knowledge in writing skills. For the first instrument, field notes and recording, the researcher interpreted the beginning, during and ends of the implementation process of semantic mapping. Furthermore, based on the collected data, the researcher interpreted the interaction between teachers and students during the implementation of

semantic mapping in the class activity. For the second instrument, students' vocabulary in the report text, the researcher used a report text vocabulary rubric for analysis. According to Cervetti et al. (2012), several items or indicators assess students' knowledge of words, such as recognition, classification of words, and context.

Hence, there were several vocabulary knowledges indicators were analyzed in the report text writing such as: 1) Recognition was an indicator that analyzed whether the students are familiar with the word, which indicates how many words develop from the target words. 2) Classification was an indicator to analyze whether the students could classify the vocabulary based on the categories provided in the semantic mapping correctly. 3) Context was the indicator to analyze whether the words developed and used in the text are relevant to the topic.

## **DISCUSSION**

### **Promoting the vocabulary knowledge of Junior High School students through Semantic Mapping in writing skill**

The first research objective was to find out and describe how teachers use semantic mapping to promote students' vocabulary knowledge in writing skills. Based on the results of observations made

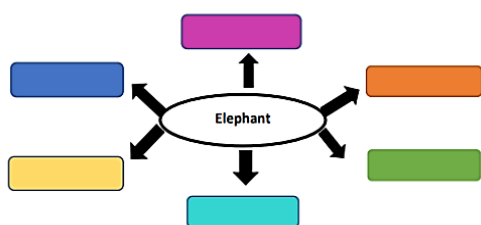
during two meetings, the semantic mapping strategy was used by the teacher as a pre-writing activity with the material taught as writing report text. When applying semantic mapping as a pre-writing activity, the teacher first showed an example of how to write a report text using a semantic mapping strategy, with the topic report text being the elephant. Under the theory of Johnson and Pearson (1984:12-13), the teacher implemented each step in the learning process correctly and clearly in the class. The teacher went through several stages: introduction, brainstorming, categorizing, personalizing, and writing.

The first stage was Introduction. In this stage the teacher introduced the topic to students by writing the topic, Elephant, on the whiteboard. Then the teacher drew a circle out of the word "Elephant" and asked students to pronounce the word. In the Introducing the theme stage, displaying pictures related to the topic will significantly help students to recall their known vocabulary about the theme (Agustina & Nur, 2018). However, at this stage, the teacher did not display an image of an elephant. It would be more effective when the teacher showed a picture of an Elephant, so students would immediately connect with the topic, start recalling the words they

already know in their memory, and look for new vocabulary.

The second stage was brainstorming. In this stage, the teacher promoted students' vocabulary knowledge about Elephant by giving students several questions that stimulated them to name various related vocabulary. The questions asked by the teacher relate to the report text material, namely the information that must be in the animal report text, such as species, food, characteristics, habitat, habits and function of the animal.

**Figure 1. Brainstorming**

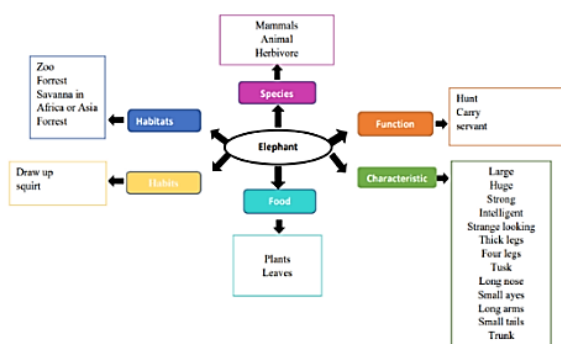


This stage is really crucial because it recalls student's prior knowledge about the topic and encourages the students to find more information about the topic. Furthermore, students provided information about the Elephant by writing as many vocabulary words as they know on the blackboard. Applying this step is suitable with the theory of semantic mapping from Johnson and Pearson (1984:12-13), in which

students either directly or are assisted by the teacher to list vocabulary related to the topics on the blackboard. Based on the results of the researchers' observations, students used the dictionaries and cell phones they brought under to find vocabulary related to the topic of Elephants. They were active enough to write a few words on the blackboard. The teacher's role at this stage was to direct students to write and pronounce each vocabulary correctly and ensured that no vocabulary was rewritten on the blackboard using a semantic mapping strategy.

The third stage after listing vocabulary was categorizing. At this stage, the teacher encouraged students to be able to group the words they have listed before writing based on the categories in the semantic mapping consisting of species, characteristics, habits, habitats, and functions on the blackboard.

**Figure 2 Categorizing**



The fourth stage was personalizing. With the help of this semantic mapping, the teacher then encouraged the students to add as much vocabulary as possible in each category. Semantic mapping is a very engaging way for students to provoke students to think, display and use the words they know (Nofriati, 2017). At this stage, students actively opened their dictionaries to find the vocabulary they had in mind and display the word in the semantic mapping on the blackboard. They visualize vary of vocabulary related to the topic through semantic mapping.

The fifth stage was writing. After completing the semantic mapping, the teacher directs students to make sentences in each word in each category and then make them into sentences and then arrange them into text according to the structure of the report text. When used as part of the pre-writing phase of a lesson, an exercise known as semantic mapping could activate learners' schemata by introducing them to the

pertinent keywords (Mah, 2016). Thus, every vocabulary in this semantic mapping is a keyword in the text.

The teacher drew a semantic mapping on the blackboard. Reynolds (1980) states that three elements in semantic mapping: the core concept, the categories, and the supporting information. Similarly, the semantic mapping depicted by the teacher on the blackboard consists of three components. The first was the core concept as a text topic: Elephant. The second was the categories developed from the main topic. The word Elephant was also developed into several categories according to the theory studied in the report text, such as species, characteristics, habits, habitat, and function. Students also drew semantic mapping in their notebooks. The third was supporting information which contained several vary vocabularies developed based on categories. Thus, each vocabulary in this semantic mapping has a relationship with one another. It proved that semantic mapping visually displays the relationship between words in the language (Georgakopoulos & Polis, 2018b).

Teacher used the strategy of Semantic Mapping to promote students' vocabulary knowledge; students are not monotonously told to write new vocabulary and memorize it but encouraged students to



develop their rich vocabulary knowledge, encouraging them to think critically about the relationship between a word and a topic. The students were motivated and interested in learning the vocabulary either they already know or words that are new to them. They were encouraged to think critically in choosing the right vocabulary to be placed in the semantic mapping that has a relationship with the topic and between categories. Furthermore, students were able to develop knowledge and visualize their ideas on topics written through semantic mapping.

#### **Students' Vocabulary Knowledge in Report Text when implementing semantic mapping in writing skill**

The second research objective was to find out how the students' vocabulary knowledge is in their report text when implementing semantic mapping in writing skills and what vocabulary knowledge was promoted by the semantic mapping. To reach this objective, the teacher divided the students into seven groups, each consisting of 5 students. Semantic mapping activities are very suitable for being done in groups (Purwanto, 2019). Then the teacher gave a topic for each group. They wrote report texts about rabbits, butterflies, dogs, chickens, and cats. Each group got worksheets consisting of two sheets. The first sheet contained activities where students must

complete the semantic mapping by writing vocabulary into each existing category according to the topic. This Semantic Mapping assisted students to recall the knowledge of words (topic) and write new vocabulary that they did not know before in the semantic mapping category section as much as possible. The second page of the worksheet contained instructions for selecting the suitable vocabulary in the semantic mapping and then in the list part. Students then made sentences based on the vocabulary chosen as keywords and then arranged them according to the structure of the text report so that it became a complete report text. Students must underline each keyword in the sentence as well to make it easier for teacher and researcher to analyze students' writing. Each vocabulary or keyword that students underlined in the report text was analyzed by research using the students' vocabulary in the report text rubric adapted from Cervetti et al., (2012). Furthermore, there were three vocabulary knowledge that would be analyzed from the students report text; Recognition, Classification, and Context. The student vocabulary knowledge could be seen in the following table.

Table 1. The Analysis Result of Students Vocabulary Knowledge in Report Text

Group	Vocabulary Knowledge Aspects		
	Recognition	Classification	Context
1 Rabbit	The students were familiar with the topic of Rabbits. They wrote around 18 words related to the word Rabbit, which are listed in the semantic mapping and written in the report text.	The words were classified correctly according to the categories provided in the semantic mapping. Some words, such as <i>small body, long ears, fluffy, and strong,</i> should be put in characteristics, but the students categorized them as species.	The words were picked from semantic mapping and used in the text were relevant to the topic. They had almost enough supporting details, making the writing easy to understand
2 Butterfly	The students were very familiar with the topic that was Butterfly. They wrote around 20 words of information from the butterfly.	They correctly classify most of the words according to the categories provided in the semantic mapping	The words were very relevant to the topic. The writing had significant enough supporting details and is easy to understand.
3 Chicken	The students were very familiar with Rabbits. They wrote around 20 words of information about the chicken.	The words were classified most of correctly according to the categories provided in	The words used especially listed words, were relevant to the topic, had sufficient supporting details, and are

		the semantic mapping.	easy to understand
4 Dog	The students were familiar with Dog. They wrote around 19 words of information about the dog	All the words were classified correctly according to the categories provided in the semantic mapping.	The words were very relevant to the topic. The writing had enough supporting details and was easy to understand.
5 Rabbits	The students were familiar with Rabbit. They wrote around 18 words of information about the rabbits	the words were classified correctly according to the categories provided in the semantic mapping.	The words were relevant to the topic, and the writing had enough supporting details and was easy to understand
6 Butterfly	They wrote around 18 words of information about the Butterfly. The level of recognition is good	the words were classified correctly according to the categories provided in the semantic mapping.	The words were relevant to the topic, and the writing had enough supporting details and was easy to understand
7 Cat	The students were with the topic. They wrote around 18 words of information about the cat.	Most all of the words were classified correctly according to the categories provided in the semantic mapping.	The words were relevant to the topic, the writing had enough supporting details, and it was easy to understand.

The first vocabulary knowledge namely Recognition that determined whether the students are familiar with the

word, which is indicated by how many words develop from the target words. In this indicator, all groups were very familiar with their respective topics. It could be seen from the number of words and the accuracy of the writing in the semantic mapping. The average student wrote 17 to 20 words. Group 1 wrote 21 related words about rabbits in semantic mapping, and there were 18 target words chosen to be developed into report text. Group 2 has 23 related words about butterflies in the semantic mapping and 20 listed words used as sentences in the report text. Group 3 wrote 20 related words about chicken and 19 target words which were made into sentences in the report text. Group 4 wrote 22 related words about dogs, and 18 target words were developed into sentences in the report text. Group 5 wrote 18 related words about Rabbit and 17 target words used as sentences in the report text. Group 6 wrote 19 related words about butterflies in the semantic mapping and 18 target words in sentences in the report text. Group 7 wrote 19 related words about cats in the semantic mapping, and 18 words developed into sentences in the report text.

The second Vocabulary knowledge namely classification that analyzed whether the students could correctly classify the vocabulary based on the categories provided in the semantic mapping. Most of the groups

were able to group the vocabulary into each of the category in the semantic mapping correctly and precisely. Nevertheless, there are errors found in student work. In group 1, some words such as small body, long ears, fluffy, and strong in the species category were more precisely categorized as characteristics. While in the other groups, they classified words properly.

The third vocabulary knowledge was context which analyze the weather of the words that are developed and used in the text relevant to the topic. All groups used words that were relevant to the topic. They wrote various information such as species, characteristics, habits, habitats and functions of the topics they got. By making semantic mapping in advance, students are assisted to write information in report text relevant to the topic. Even though the information in their report texts was fairly simple and needed to be more detailed, each group could provide general information related to the topics they use.

Based on the student's writing results, semantic Mapping promoted students' vocabulary knowledge such as recognition of words, word classification, and the word context. Semantic Mapping is an arrangement of words in a graph that shows how new words and ideas can be connected in a text (Fauzan et al., 2019). The

semantic mapping technique encouraged and prepared students before engaging in writing activities by exploring the ideas to be written. As said by Mah (2016) that when using as part of the pre-writing phase of a lesson, an exercise known as semantic mapping could activate learners' schemata by introducing them to the pertinent keywords where. Thus, every vocabulary in this semantic mapping was a keyword in the text. So, by encouraging and stimulating students' word recognition, it was easier for students to understand the topic they are writing about and what vocabulary they used to explain the topic. They could add to their vocabulary by looking for its meaning in English as much as possible according to their writing needs. It could also enrich their vocabulary. Not just listing vocabulary, semantic mapping encouraged students to classify words into various categories in semantic mapping. These categories were the information they brought in their report text. Classifying words correctly into categories indicated that students could visually identify the meaning of each vocabulary through the map and understand the relationship between words by being in the same category. After grouping words into various categories, students chosen and used the vocabulary in the proper context in the report text that is relevant to the topic and

ideas of their writing. Thus, semantic mapping promoted and facilitated the junior high school students' vocabulary knowledge so, the students are able to write and produce a suitable report text.

## **CONCLUSION**

The teacher's application of the semantic mapping strategy to promote vocabulary knowledge for students in SMPN 28 Surabaya in writing skills was well applied in learning activities. By creating a semantic mapping, students are encouraged to be able to develop and relate one vocabulary to another. Furthermore, students can develop knowledge and visualize their vocabulary and idea on topics written through semantic mapping. They also learn to understand the relationship of a word with other words. They freely in groups think and discuss well, develop words into sentences and then become texts that can be understood. Students also easily understand the material well, especially in writing activities. When writing in groups, they understand the semantic mapping step by step, starting from the introduction, brainstorming, categorizing, personalizing and writing. With the tone of this strategy, the teacher can help students effectively, encouraging students' vocabulary related to the topics written. Thus, applying semantic mapping in

writing activities is very helpful in promoting students' vocabulary knowledge such as word recognition, word classification and the context of words, so that they can write and produce a suitable report text. On the other hand, the semantic mapping strategy helps the teacher to explain important points in writing a report text, writing ideas, and report text writing content. Teachers can efficiently explain learning theory which, of course, makes it easier for students to understand it. Furthermore, the future researchers can develop research related to semantic mapping in various other language skills, such as reading, listening, and speaking.

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