



## Exploring Semantic Mapping Strategy In Learning Vocabulary: A Narrative Inquiry

Ratini Rahmawati <sup>1</sup>, Yousef Bani Ahmad <sup>2</sup>, Praditya Putri Utami <sup>3</sup>

<sup>1,2,3</sup>Department Of English Education Universitas Singaperbangsa Karawang

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### Abstract

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*One of the main aspects that must be learned by English learners is vocabulary. In Indonesia, students vocabulary knowledge is still low. It is because students do not learn vocabulary too deliberately in English classrooms. Semantic mapping strategy is one of the strategies for learning vocabulary that can develop students' vocabulary. This study aims to explore semantic mapping strategy in learning vocabulary from students' perception. The participants of this study were 9 students of 11<sup>th</sup> grade students of Islamic senior high school, five participants will be interviewed and the data will be analyzed qualitatively. The results showed that the students revealed positive perceptions in terms of emotions and attitudes. Most students felt semantic mapping is exciting and gave benefits for them such as can recall their past vocabulary, extend their vocabulary including giving them the knowledge of the word classes. However, there were also some students have negative emotions and attitudes towards semantic mapping, but the emotions and attitudes of students are more towards the positive.*

**Keywords:** *Semantic Mapping Strategy, Students' Perception, Vocabulary Learning*

(\*) Corresponding Author: [1910631060128@student.unsika.ac.id](mailto:1910631060128@student.unsika.ac.id)

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## INTRODUCTION

One of the main components that must be learned by English learners is vocabulary. It greatly affects student performance in English class. However, in reality Indonesian students still lack English vocabulary (Sudarman et al., 2022). This becomes an issue, because it affects students' understanding of English either in written English such as the text contained in their textbooks, or spoken text such as in audio or audiovisual forms. Students with a little vocabulary knowledge will have difficulty understanding it. This is partly due to the limited contact of students with English outside the classroom (Nation, 2001), because it is a foreign language. The study of Sudarman et al. (2022) also confirmed that most Indonesian students do not yet have sufficient knowledge of high-frequency vocabulary, which is the main vocabulary that must be mastered. Therefore, the author realizes the importance of students to learn and master vocabulary, especially vocabulary that is often encountered in English texts.

When it comes to language teaching, teachers and students recognize that the acquisition of vocabulary plays an essential part (Walters, 2004 as cited in Alqahtani, 2015). If learners do not have an adequate vocabulary, it will be difficult for them to fully participate in the English teaching and learning process. Hence, the teacher plays a crucial role in facilitating the development of students' vocabulary knowledge. While it is acknowledged that some students may acquire vocabulary incidentally through reading (Shue, Anderson, & Zhang, 1995, as cited in Taylor et al., 2009), it is important to note that students who encounter difficulties in comprehending texts usually require

explicit instruction to effectively grasp new concepts (Taylor et al., 2009). According to Webb and Nation (2012), it has been asserted that the utilization of explicit learning strategies can lead to the fast and efficient acquisition of knowledge. This implies that teachers in English classrooms should adopt explicit vocabulary instruction and employ suitable strategies for the success of vocabulary learning.

A meaningful vocabulary learning strategy is a strategy that can facilitate students to store new vocabulary items in their long-term memory. One of the vocabulary learning strategies is semantic mapping strategy. Graves (2008) and Stahl & Vancil (1986) stated that semantic mapping is one of the most effective ways for teaching vocabulary because it encourages students to consider word connections and create a graphical representation of the interrelationships between the words and concepts in a particular text (As cited in Vakilifard et al., 2020). In semantic mapping, the teacher encourages students to explore what words relate to the vocabulary or topic being learned, which will eventually be placed in the form of a word map. Students are asked to connect the target vocabulary with their prior knowledge or words. Christen et al. (1991) stated that prior knowledge plays a crucial role in the process of constructing meaning, leading to a deeper and more meaningful learning experience as opposed to mere memorization of information. Consequently, semantic mapping is referred to as constructivism theory, which was introduced by Piaget as a learning theory. This theory believes that knowledge and meaning are produced or influenced by past knowledge and personal experiences (Sarbah, 2020).

Numerous studies of semantic mapping strategy has been examined by scholars and researchers to find out how effective is in teaching vocabulary and in vocabulary memorization (see Badr & Abu-Ayyash, 2019; Al-Khasawneh & AlHawamdeh, 2023; Nugroho & Arini, 2021; Fernando, 2021; Udaya, 2022). Badr & Abu-Ayyash (2019) conducted research on the effectiveness of semantic mapping or rote memorization. Evidently, both of these strategies can improve students' recall of the target vocabulary. However the results showed that the improvement from the implementation of semantic mapping is more significant than rote memorization. Furthermore, Al-Khasawneh and AlHawamdeh (2023) also investigated the potential for semantic mapping strategies at King Khalid University taken from students majoring in English. The results of the study showed that there was a significant influence on vocabulary proficiency. In addition, in research conducted by Udaya (2022) in seventh grade to see which strategy between semantic mapping and wordlist strategy can help students in remembering vocabulary better. The results revealed that both can increase students' vocabulary knowledge but the better improvement occurs in semantic mapping.

The majority of studies have compared the effectiveness of semantic mapping to other strategies, whereas the present study will examine students' perception of semantic mapping in learning vocabulary. In addition, the majority of previous research employed quantitative method, whereas this study employed qualitative method. To fill these gaps, the author will conduct qualitative research in one Islamic senior high school to examine how students perceive semantic mapping in learning vocabulary. Therefore, the purpose of this study is to investigate students' perception of semantic mapping strategy in learning vocabulary.

## **METHODS**

This study used qualitative approach with the research design called narrative inquiry. In narrative inquiry, storytelling and research are combined as data of the

research for findings presentation (Barkhuizen et al., 2014). Narrative inquiry can assist the researcher in comprehending how teachers and language students arrange their experiences which in this case in language teaching and learning (Barkhuizen et al., 2014). The participants of this study are 9 the students from 11th grade of Islamic senior high school in Bekasi. However, only five students will be interviewed by the researcher for the research data. First, the students will learn vocabulary using semantic mapping strategy from exposition text entitled “Five Drinks to Help You Lose Weight” in their English textbook. The students will use the word “health” and “drink” to become the central word that will be learned. Furthermore, the students will work in group in learning vocabulary. After the learning activities have been conducted, then the researcher will interview the students and asked about their perception of semantic mapping. Moreover, for data analysis, the researcher will use thematic analysis by Braun and Clarke (2006). Those are six phases in analyzing data using thematic analysis. The data will be recognized, coded, identified for becoming themes. Furthermore, the themes will be reviewed and defined. The last one, the author will write and produce a report in a form of description or narrative of the results.

## **RESULTS & DISCUSSION**

### ***Results***

This study investigated students’ perception of semantic mapping in learning vocabulary. Regarding the result of the interview with the students, it revealed how students feel and think about semantic mapping strategy in learning vocabulary. The authors will concentrate on two cognitive processes of perception which are emotions and attitudes.

#### **a. Students’ emotions toward semantic mapping strategy in learning vocabulary**

According to the interview result regarding students’ experiences in learning vocabulary using semantic mapping strategy, it showed that semantic mapping was exciting for students in learning vocabulary.

“I felt confused, because it was kinda hard, we have to think how this word can be related to the next word. I understand little by little. It’s exciting.” (Participant 2

“I felt happy. I think it was complicated when learning vocabulary by just reading dictionary, while by using the semantic mapping, we just have to connect word by word...” (Participant 4

“It was fun, exciting, because we should dig deep from one word and it made me think about where this or that word comes from. It’s more fun, but challenging.” (Participant 5)

According to the feedback provided by students, it is evident that semantic mapping elicits a sense of excitement and happiness, because they just have to consider and relate among words. During the process of learning, the students were given the opportunity to establish connections between words and either their existing vocabulary or past knowledge. The teacher did not decide whether those words should be verb, adjective, adverb, or noun. Consequently, students freely establish meaningful connections with their prior knowledge. Some students reported that determining the relationship between words was not only exciting but also confusing and challenging. It was because they occasionally know certain words in *Bahasa* but not in English. However, the majority of students reported that it was more exciting.

“It was fun when discussing with friends. We discussed each other.” (Participant 1)

“It was fun. We can think about how one word can be connected to other words. When we did not know the word, then our friends know it, so we can get the new knowledge. I mean, it’s about working together. (Participant 3)

Moreover, some participants claimed that having a discussion with their peers was also an enjoyable activity. They can share their ideas on the vocabulary and their prior knowledge concerning the words under discussion. In addition, when they forget or do not know a particular word, their peers will help them find it, for instance when they did not know the English terms, he or she could also ask the teacher for clarification.

#### **b. The benefits of semantic mapping strategy in teaching and learning vocabulary**

According to the interview data, from the students’ attitude, the researchers discovered that there are some benefits of semantic mapping strategy that students experience. It was be able to recall students’ past vocabulary, extend students’ vocabulary knowledge, and provide knowledge about the word class.

“The advantages are it can remind us about vocabulary that we have known.” (Participant 2)

“...But when there are words we have not memorized yet, semantic mapping can help us to remember those words again.”(Participant 3)

“It was kinda we memorize again our vocabulary that we have known. It made us think of and try to remember our previous vocabulary.”(Participant 4)

The statements conveyed by the three participants indicated that semantic mapping can recall students’ past vocabulary. It can make students recalling words that they have known in the past, because by using semantic mapping they are encouraged to make connections between words with their prior knowledge or words. For instances, they were able to connect words with their experience, general information, or something that their interests. Furthermore, most of the students apparently related words with their general knowledge regarding those words they already have known.

“The advantage is like we are able to know the meaning of a word more meaningful. We did not just know that “hospital” is “rumah sakit” but we dig deeper into the meaning.”(Participant 1)

“It expands our knowledge, more broaden our vocabulary.” (Participant 2)

“We can have knowledge of new vocabulary that we have not known previously.” (Participant 3)

“I would like to explain the advantages first. It was like we know new words and the word classes such as verb, noun, or adjective.” (Participant 4)

“Yeah, it can add new vocabulary...” (Participant 5)

In addition to its ability to activate students’ prior knowledge, the utilization of the semantic mapping strategy clearly facilitates the expansion of students’ vocabulary knowledge. This means that they can acquire new vocabulary and obtain a great deal of vocabulary from a single word.

#### **c. The challenges that students face during the teaching and learning vocabulary using semantic mapping strategy**

Based on the findings derived from the interview conducted with 11th-grade students, recognized from their attitudes, it was observed that these students encounter some difficulties while engaging in the process of learning vocabulary through using of the semantic mapping strategy. Some students encountered challenges when trying to establish connections or relationships between words. They also face difficulties while

engaging in discussions with their peers who are uncooperative and presenting their semantic maps.

“It is kinda complicated like how to connect this word. The teacher asked us to make one word to be related each other with other words, and I think it is kinda hard.” (Participant 1)

“It felt like I was confused. I was worried if the words did not relate, so that we discussed it first with our friends’ group whether the words would be written and placed into the semantic maps.” (Participant 3)

The students conveyed they felt slightly complicated and confused when determining the connection among words. It can also be seen from the confused expression on their face during the observation. In addition, they discussed the words with their group of peers before placing them in their semantic maps to determine their relationship. During the interview, there was a student stated that the difficult part was when he forgot the spelling of the word; for example, when he thought about what word related to the word "doctor," it reminded him of "stethoscope," but he did not know how to spell the word "stethoscope" or how to write it.

“I felt not really interested in presentation part, because it was hard to explain our semantic maps result.” (Participant 1)

“I felt confused when we were asked to present our semantic maps result, we were asked to explain the vocabulary we got and explain how the relationship among them.”(Participant 3)

In addition, dealing with the presentation throughout the semantic mapping process is another challenge for students. The teacher asked them to explain how terms related to one another, including the rationale for their connections. They felt quite difficult when explaining it. In addition, they felt it was difficult when they generated their semantic maps with a group of peers and discussed the words together where if they did not pay close attention while discussing and placing the words into semantic maps, they may forget the relationship between one word and the next word when presenting the information.

“...There is some of my friends’ group who did not really contribute when we discussed the words together. Sometimes they did not respond when I asked their opinion. They were not collaborative.” Participant 4)

In addition, participant 4 reposted that his group was lack of collaboration. He thought that his group did not really assist each other when constructing the semantic maps. His peers in his group did not really contribute to thinking about words relevant. Hence, collaboration is also essential during the discussion to produce appropriate semantic mapping result.

### ***Discussion***

In this section, the researcher will summarize the interview data presented in the research findings. Using a semantic mapping strategy, the researcher will concentrate on the perceptions of students during the learning process. Then, the findings will be linked to relevant theories and prior studies.

In human brain, there is a layer called a layer of perception which one of the cognitive process (Wang, 2005) that consists of emotion, motivation, and attitude (Wang et al., 2006). This study only focuses on emotion and attitude of the students.

According to the findings of the interviews, all students found and felt that semantic mapping is exciting in terms of learning vocabulary. It was exciting because students made connections between words. They connected words to their prior

knowledge which is the knowledge they have known about. It is clear from their expressions during the researcher's observation that they looked excited. At the perceptual layer, human emotions can be categorized into two distinct and opposing categories: pleasant and unpleasant (Wang, 2005). This further finding is included in the pleasant emotions or positive emotions. While, from the hierarchy of emotions, the pleasure emotions such as happiness and excitement are part of strong emotion (Wang, 2005). Aside from being exciting, several students found it challenging and confusing, but nevertheless fun. As a result, semantic mapping provides positive experiences for students' senses. Consequently, students have a positive perspective toward the learning process in the term of emotions.

This finding is similar with the study of Udaya (2022) stated that the students responded positively to semantic mapping. It is also in accordance with Al-Khasawneh and AlHawamdeh (2023) which confirmed that the students felt very excited and attracted to learn vocabulary using semantic mapping.

Furthermore, semantic mapping also gives benefits and some obstacles for students recognized from students' attitude. According to A. Eagly and S. Chaiken, an attitude is a human's tendency to assess a person, concept, or group positively or negatively in a given environment (Chaiken and Eagley, 1992 as cited in Wang, 2005). While, in this case, the students evaluate the semantic mapping strategy in learning vocabulary process. Therefore, the students revealed that semantic mapping can recall students' prior vocabulary and extend students' vocabulary which the students can learn new words and the word classes. It means the students have positive attitudes towards semantic mapping strategy. It is also supported by the study of Fernando (2021) indicated that semantic mapping is beneficial for the students which it expanded students' vocabulary, helped to recall past knowledge, and helped most students in learning new words. While, in other studies (Arief and Ira, 2021; Badr and Abu Ayyash, 2019), the researchers compared the semantic mapping with other strategy, but the better vocabulary improvement occurred in semantic mapping strategy.

Besides the benefits of semantic mapping strategy, there are also some obstacles faced by the students during the teaching and learning process. Variety difficulties were found such as when connecting among words, discussing with friends, and presenting the semantic maps. In the study of Fernando (2021), there are also some students stated they felt difficult such as adding ideas when the topic is hard and dividing categories. Thus, the students not only having positive attitudes, but also have some negative attitudes towards semantic mapping. However, they gain more positive emotions and attitudes towards.

From the discussion section, it can be concluded that the findings answered the research question. Apparently, the students perceive the semantic mapping strategy positively in terms of emotions and attitudes. Despite there were some obstacles faced by the students, semantic mapping gives more positive results to the students.

## **CONCLUSION**

To summarize, this study investigates students' perceptions of the semantic mapping strategy learning vocabulary. According to these findings, the students have positive emotions and attitudes towards semantic mapping strategy. Although there are some parts of semantic mapping that some students felt it was confusing and difficult, but the findings showed more positive results. From the emotions aspect of perception, it showed that the students felt semantic mapping was interesting and made them happy

and excited to learn vocabulary. However, there are some students who confused and struggled while making the connection between words. Furthermore the attitudes aspect, the students stated that semantic mapping has some the advantages and disadvantages in learning vocabulary. From the advantages, it helps students to recall previous vocabulary and extend their vocabulary knowledge such as acquiring new words and the word classes. While, the disadvantages or obstacles experienced by the some students are having difficulty when relating words, discussing with non-collaborative peers, and presenting their semantic maps. However, most of the students have the positive attitudes during the process of semantic mapping strategy in learning vocabulary.

Moreover, based on the findings, this study provides numerous recommendations. First, the author proposed to students that they be more active in asking questions to the teacher during learning activities. Second, the author proposes that the teacher determine the quantity of words on their students' semantic maps that students must obtain in order to encourage them to acquire greater vocabulary. Future researchers are likely to be inspired to do further research on students' perceptions of semantic mapping strategy in learning vocabulary in different location which as a result, separate case reports will be produced in each location in order to provide better quality for vocabulary learning.

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