

## Escalating Students' Vocabulary through Semantic Mapping Learning Model

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### ABSTRACT

The biggest obstacle for teachers and tutors is the lack of students' vocabulary. It causes students to feel difficulty understanding the meaning of English, particularly their performance in applying and developing four skills of English. Therefore, this research aims to enhance students' English vocabulary mastery through a semantic mapping learning model. This model was applied to seventh-grade students in the 7.2 class of MTs Al-Yusra Gorontalo, consisting of ten students. Classroom Action Research (CAR) was used as the method of this study. For collecting data, there are four phases of CAR used; they were planning, action, observation, and reflection. Two cycles were applied in this study because the first cycle did not improve students' vocabulary. Based on the data finding on cycle one, the scoring average of students' task results was 56,2. It is because 80% of students still got a low score, and 20% got a perfect score. The content of the task was about the questions of material "Noun". Then, in cycle two, it was applied by involving students in the classroom action; they were asked to present the result of their group discussion of semantic mapping of Noun material. After that, they did the second task, and the average of their score was 79,5. It could be concluded that the semantic mapping model greatly affected the students' mastery of the vocabulary taught by the teacher.

## INTRODUCTION

Vocabulary becomes the basic problem in learning English. It is stated by several teachers and tutors of English in schools and courses when the researchers have conducted the preliminary observation for observing their obstacles in teaching English. The biggest obstacle for teachers and tutors is the lack of students' vocabulary. It causes them to feel difficult to understand the meaning of English, particularly in applying four skills of English. All this time, most teachers only applied to memorize model to increase students' vocabulary mastery. Unfortunately, it does not work evenly for all students because some memorize poorly. As Thornbury, cited in Hapsari (2020), stated between grammar and vocabulary, having a minimum knowledge of grammar is better than having a few words. Besides, one of the critical elements of learning a language is developing vocabulary, which is also thought to be the most crucial part of learning a foreign language. That is why memorization is not the best model for teaching vocabulary (Udaya, 2021). It means that mastering vocabulary is crucial for language learners because it helps them to develop their listening, speaking, reading, and writing skills.

According to (Zu, 2021), phonetics, grammar, translation, and vocabulary are the four pillars of English proficiency and are referred to as the language's "components." Teachers use a variety of approaches and ideas to help students and children master vocabulary. When students master lots of vocabulary, they easily understand what they listen to. The process of reading will be fun because they have to understand every word used, they can speak fluently by producing the appropriate words, and they can develop their performance in writing skills. Consequently, vocabulary should be the basic essential knowledge for a novice language learner. Students must master lots of vocabulary to ease their development and enhance their listening, reading, writing, and speaking abilities. Parents and instructors at school must follow a set of steps to teach language successfully. (Thornbury, 2002) describes several processes. The first is labelling, similar to generating a concept of mapping in each word. Categorizing is the second. Identifying the names and forms of items is essential, but categorization is also crucial. The final step is network construction. Children are now learning more sophisticated vocabulary, such as different colours, family members, and body parts.

Based on the previous problem, there are many teaching vocabulary strategies, such as sorting, on-purpose errors, word races, inquiries, and mind mapping or semantic mapping. Learning strategies and methods must adapt to the times (Purwoko, 2010). Nevertheless, semantic mapping is one of several better strategies for developing vocabulary due to understanding and comprehending the meaning of words or phrases. The work system of semantic mapping is to map the central topic, which becomes a keyword. For example, the main topic is "land transportation", and subtopics are cars, motorcycles, and bicycles. Semantic mapping is related to mind maps that utilize both sides of the brain; the left and right hemispheres. In addition, mind mapping is a learning method/strategy connecting both sides of the brain to receive and process new ideas and knowledge. Learning by applying the mind mapping

strategy will give learners a huge advantage because the left hemisphere's linking function consists of words, numbers, and lists, while the right hemisphere consists of colours, imagination, and dimension. Buzan (2003, p. 6). Thus, the mind mapping strategy can guide learners in learning many subjects and materials, including vocabulary, without memorizing.

Therefore, the semantic mapping model will be applied to seventh-grade junior high school students, particularly in teaching and learning English vocabulary. This model aims to enhance students' English vocabulary mastery through action research. Most students still have difficulty developing their English skills due to a lack of vocabulary.

## LITERATURE REVIEW

Mastering vocabulary holds significant importance for language learners as it enhances their proficiency in listening, speaking, reading, and writing. Vocabulary acquisition emerges as a fundamental challenge in English language learning, as noted by various educators and instructors during preliminary observations of teaching English. The primary hurdle faced by teachers and tutors is the insufficient vocabulary of students, which hampers their ability to comprehend English effectively, especially across the four language skills. Traditionally, many educators have relied solely on memorization techniques to improve students' vocabulary mastery. However, the effectiveness of this approach varies among students, as some struggle with memorization techniques.

According to the research findings, the utilization of semantic mapping demonstrates a positive impact on students' proficiency and comprehension of vocabulary. This method not only contributes to enhancing vocabulary but also influences other English skills, notably speaking, as evidenced by students' presentations. The data indicates a notable improvement, with the average student scores rising from 56.2 to 79.5 following the integration of the semantic mapping model in teaching noun concepts. This improvement is particularly evident when students engage in collaborative project assignments based on semantic mapping, subsequently presenting their work to the class.

The statement of Zu (2021), phonetics, grammar, translation, and vocabulary constitute the fundamental components of English proficiency, often regarded as the language's foundational elements. Educators employ diverse methods and strategies to facilitate vocabulary acquisition among students and children. Proficiency in vocabulary significantly enhances comprehension in listening and reading, as students grasp the meaning of each word encountered. Moreover, a rich vocabulary facilitates fluency in speech and fosters the development of writing skills. Consequently, vocabulary stands as an essential cornerstone for fledgling language learners, as it underpins their progress and enriches their abilities in listening, reading, writing, and speaking. Parents and school instructors alike should adhere to a structured approach to effectively impart language skills to students.

## METHODOLOGY

This study uses CAR (classroom action research) because the researchers want to improve and increase students' vocabulary mastery by using a semantic mapping model. This research is included in experimental action research because the researcher applies a new learning model, especially a learning model, to master English vocabulary. Classroom action research is research conducted by the teacher, either individually or in groups, aiming to solve the learning problems in the class (Sutoyo, 2021). This research site and participants are seventh-grade students in MTs Al Yusra, an Islamic junior high school in Gorontalo. MTs Al Yusra is selected to participate in this research because this school still needs the government's attention, particularly educators and academics, to develop the education quality in this school. This school was founded in 1986, yet they only have 129 students in seventh to ninth grade. Every grade is divided into two classrooms.

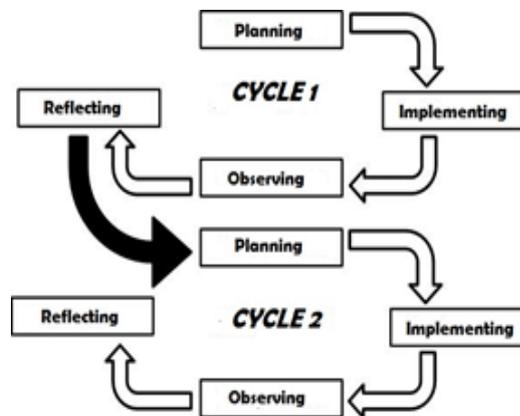


Figure 1. The Classroom Action Research Process in Applying Semantic Mapping Model

The action research model is adopted from Kurt Lewin's model, which consists of four stages: planning, action, observation, and reflection. As the statement of Tomal, 2010 that before applying planning and action, it is better to identify the basic problem that happens, so this study's problem is students' lack of vocabulary mastery and understanding. In the planning stage, the researcher prepared a lesson plan using a semantic mapping model, learning materials, and learning media such as an LCD and a laptop. In the action stage, the researcher taught the Noun material to students by using a semantic mapping model. First, students are invited to tell about the places they have visited, with whom they went, and what things they brought. Then students are shown a slide show about the Noun material through the LCD, and the teacher relates it to what was previously told. Afterwards, the teacher began to interact and explain to students about noun material. In this noun learning, the teacher narrowed the discussion to the "Things" section of the noun material. The teacher took the topic of "Transportation" as material elaborated in semantic mapping. At the observation stage, the teacher observed whether or not the learning process with this semantic mapping model is appropriate to the curriculum, particularly the syllabus for English subjects. The teacher also

noted things that could be taken in the learning process of the semantic mapping model to be applied in the future. In the last stage of reflection, students were given assignments to evaluate the material and models that had been used previously. Teachers and researchers also discussed the actions implemented and the results of student evaluations.

## RESULTS AND DISCUSSION

In cycle 1, students were shown the change, which could be seen from the many positive responses when the researcher applied the semantic mapping model to the noun material. They could identify objects around them and classify them into noun parts. In the material prepared in the lesson plan, nouns were divided into four parts: people, animals, places, and objects. Each section was further elaborated into examples of nouns around students; for example, mosques, hospitals, and offices are in the place section. The theory from Miyazaki cited in Hapsari (2020) is that semantic mapping is a mapping strategy from keywords or one concept to expand vocabulary that relates to each other. Students' understanding of noun material increased because the highest score on their assignment was 88. However, the change was not evenly distributed to all students because there was still the lowest student who scored 20.

Based on the evaluation results in cycle 1, it could be concluded that there was not a significant change when the semantic mapping model was applied. Therefore, it was necessary to carry out cycle two to improve students' understanding of the concept of semantic mapping. The results of the evaluation scores had not increased too much for some students. Still, the enthusiasm for learning and student motivation during the learning process was evident because of the different teaching models. Where there was a brief explanation from a teacher, students easily and quickly understand the material presented in the semantic mapping model. as well as the use of technology-based visual media. Students enjoyed applying the semantic mapping model enthusiastically when they were invited to play games "in groups to group" some of the nouns provided in each part of the material. They could clearly remember the examples of objects that correspond to the parts of the Noun. It is because the benefits of the semantic mapping model can help students' brains remember deeply without memorizing.

### Cycle 2

As the theory stated by Whorter cited in (Rahma, 2016), semantic mapping is described as the image of a conceptual relationship or a visual representation of information. Grouping related words could also be considered a graphical technique for vocabulary growth and knowledge expansion. Therefore, in cycle 2, the researcher narrowed the discussion of the material to one part of the Noun, namely things. Things are part of nouns, with examples such as writing utensils, cutlery, and vehicles. Researchers took one keyword, namely vehicles, to be elaborated on several features such as vehicles in the land, water, and air, and each part of them had an example. For instance,

land vehicles are cars, trains, motorcycles, bicycles, buses, and trucks. Water vehicles consist of ships, sailboats, submarines, and canoes, as well as examples of air vehicles, namely airplanes, helicopters, and hot air balloons.

For the evaluation model in this cycle, the researcher divided the students into three groups to make a semantic mapping with different keywords. Larsen-Freeman, 1986 believed that working in a small group can help students to practice their ability and skill in language. Group one got the keyword of animal, group two got the keyword of place, and group three got the keyword of people. Each group was asked to discuss their respective keywords to be elaborated into several parts to create a semantic mapping of students' work. When students finished discussing it, they were asked to present their work in front of the class. The result of group one was that animals are divided into three parts: animals that live on land, water, and air. Animals on the land included cows, cats, dogs, and tigers; animals in the water were crabs, fish, dolphins, and turtles; and animals in the air were eagles, bats, and pigeons. The second group that got the keyword of the place was divided into three parts, they were; the transit place of water vehicles, air, and land. For instance, the place where the plane transit was the airport, where the ship stop was the port, and where the bus stop was the terminal. Then the third group divided the types of "people" and their jobs according to their sites. For instance, people who work in the air, namely pilots and flight attendants; those who work on the land are drivers, teachers, and doctors; and those who work at sea, such as machinists and fishers.

The involvement of students in this presentation turned out to have a substantial positive impact as their scores increased individually and on the class average. Some students got the highest score of 90, and some got the lowest score of 70, so the class average increased to 79.5. the semantic mapping model gave a very significant change in cycle two because of the involvement of students in discussing and presenting the project assigned to them. Semantic mapping can also increase understanding of new vocabulary by elaborating concepts and mapping words that relate to each other so that they can remember the vocabulary without having to memorize it word by word. In addition, the biggest reason the semantic mapping model can guarantee that students can master a lot of vocabulary without remembering is that in the presentation of this model, there is a collaboration between words, colours, and images packaged in one complete package. The left human brain is dominant in words, numbers, and lists, while the right brain is dominant in creativity, such as images, colours, and shapes. So, combining these two brain functions provides enormous progress and benefits in the learning process of children, adolescents, and parents. Like the theory from the father of world psychologist Tony Buzan 2018, words, colours, lines, and pictures are created through a mind map. It is simple to put together. Users can use mind maps to organize their thoughts, interests, and daily activities, improve their memory, generate unique ideas, save time and use it more efficiently, improve their grades, and achieve better rates.

Table 1. Students' Score Learning Vocabulary through Semantic Mapping

Name	Task 1 (Cycle 1)	Task 2 (Cycle 2)
AP	65	70
ADIY	52	90
ABAS	65	70
AMD	88	90
AZBM	20	70
SP	36	90
SM	60	70
SP	68	90
RM	76	85
RCP	32	70
<b>Average Score</b>	<b>56.2</b>	<b>79.5</b>

## CONCLUSIONS AND RECOMMENDATIONS

Based on the results of research on the importance of a semantic mapping model that can enhance students' vocabulary mastery and understanding, the researchers draw the following conclusions:

- Changes and increases in the average score of students from 56.2 to 79.5 after the implementation of the semantic mapping model in teaching noun material, especially when they are involved in making project assignments based on semantic mapping in groups and presenting them in front of the class.
- Semantic mapping affects vocabulary improvement and other English skills, such as speaking, as seen from students' performance when presenting their work.
- Because the skill seen in this study is speaking, the next researcher is expected to research the semantic mapping model to improve other skills such as reading, writing, and listening. With a large number of vocabulary acquired and remembered by students, they will be fluent and find it easy to express their skills.
- The semantic mapping model is believed to be able to organize and map all the information the brain receives. It is because the mind mapping design performs the functions of both the right and left hemispheres of the brain so that humans or students will easily remember all the information presented in the form of mind mapping.

## FUTHER STUDY

This research still has limitations so further research on the topic still needs to be carried out "Escalating Students' Vocabulary through Semantic Mapping Learning Model."

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