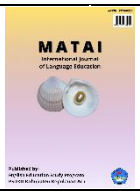

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Improving The Eighth-Grade Students' Vocabulary Mastery Using Thinking Maps Strategy

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Abstract

This research aimed to see how students' vocabulary mastery improves using The Thinking Maps Strategy. This research was designed in a collaborative classroom action research with a mixed method approach to gain the data. There were two cycles implemented in practical teaching activities. The data was analyzed using a mixed approach, quantitative and qualitative. The quantitative data was analyzed using tests, the qualitative data was analyzed using descriptive qualitative to gain meaningful information to support quantitative data. The result of the research indicated that there were improvements in students' vocabulary from cycle 1 to cycle 2. The result of the first cycle showed that only 10 (55%) of students could achieve the criteria of success set for this research. The result of cycle II had significantly improved. The students also experienced a very significant development of activeness in the classroom by applying the thinking maps strategy in teaching students gave a very positive response, that they felt happy and interested in learning with this strategy because it can improve their vocabulary. This research also suggests that to improve students' vocabulary in learning effective and fun activities for students.

Keywords: *Students, Vocabulary mastery, Thinking Maps, Classroom Action Research*

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INTRODUCTION

Students' language abilities often be determined by their vocabulary since their command of communication and language expands as they increase their vocabulary. Although they can understand what is being said, some students still have difficulty communicating with others or native speakers, Aziz & Yamat (2016). This happens because they feel intimidated or inadequate about their language abilities. This situation is a result of their limited vocabularies which impact on their ability to communicate and express themselves clearly and smoothly. To overcome this problem the teacher's role as a facilitator in improving students' vocabulary mastery is very important. In the teaching and learning activity, English teachers should be more creative and innovative giving themselves a great chance, Yusof and Nazir (2011). Based on the explanation above, in

this study, the researchers conducted the Thinking Maps strategy to improve vocabulary mastery of the seventh-grade students at SMPN 48 Maluku Tengah.

Thinking Maps is a set of graphic organizer techniques used in education to visually assemble content, solve problems, and make decisions (Hyerle, 2014). Eight diagram types are proposed to match with eight different essential thinking processes. These diagrams provide a common visual language like the information structure often employed when students take notes during a content lesson (Hyerle & Yeager, 2007). Thinking maps are one of the learning strategies related to students' way of thinking to conceptualize a problem to be simpler with their understanding. When using Thinking maps students must quickly think critically to simplify a problem that is conceptualized into important points after getting the key points of the problem then it can be elaborated to find a solution or an answer. In direct or indirect communication, you must use the right vocabulary, whether, in formal or informal situations, critical thinking skills are needed to be able to make decisions about which words are the right to use.

McGrath & Willcutt (2022) stated, "Students are no longer confused by poorly organized visual maps based on thinking processes, but instead have a common visual language for cooperative learning". Thinking maps have 8 types of ways of thinking and each type has a different purpose according to the needs of students. They are easy to understand and can be applied anywhere and anytime, (Hyerle and Apler, 2011). This makes researchers interested in using this strategy especially to increase students' vocabulary.

Thinking Maps is a set of graphic organizer techniques used in education to visually assemble content, solve problems, and make decisions (Hyerle, 2014). Eight diagram types are proposed to match with eight different essential thinking processes. These diagrams provide a common visual language like the information structure often employed when students take notes during a content lesson (Hyerle & Yeager, 2007). Thinking maps are one of the learning strategies related to students' ways of thinking to conceptualize a problem to be simpler with their understanding. When using Thinking maps students must quickly think critically to simplify a problem that is conceptualized into important points after getting the key points of the problem then it can be elaborated to find a solution or an answer. In direct or indirect communication, you must use the right vocabulary, whether, in formal or informal situations, critical thinking skills are needed to make decisions about which words are the right to use.

In this study the researcher used a bubble map, which is a type of thinking map, the reason why the researcher chose this map is because in bubble map places more emphasis on students' mastery of adjectives, adverbs, and nouns. This is the focus of the researchers, namely increasing students' vocabulary on adjectives, adverbs, and nouns. The bubble map is used for describing things using adjectives, it helps the students to develop their ability to identify qualities and use descriptive words (Hyerle, 2011). In the implementation of thinking maps the teacher acts as a facilitator where the teacher oversees explaining how bubble maps work to improve student adjectives, nouns, and adverbs then after that students can practice it in their learning activity. This study will use a mixed research approach using Classroom Action Research (CAR) to support this study.

These are some previous studies about the role of Thinking Maps for teachers and students. Calvin and Gray (2022) argue that; in Double-bubble thinking maps and their

effect on reading comprehension in Spanish-English bilingual middle school students with learning disabilities. This study found that the effects of the double-bubble map on reading comprehension benefited all students. The general use of the map may prove beneficial to many students, including bilingual students with LD.

Karim (2021), A Review on Primary School Students' Narrative Essay Writing Skills: A Focus on an Intervention Based on Thinking Maps. The findings of the review served as guidelines for the researchers to propose an intervention that uses thinking maps as a learning tool. With such a thinking tool, teachers can help their students search for and organize ideas for their essays in a structured fashion.

LITERATURE REVIEW

Vocabulary mastery is needed to express our ideas and to be able to understand other people's sayings, or in academic activity, especially for junior high schools who must get a broad vocabulary as a basis for acquiring their English. Kusrini (2012) stated that most junior High School students are not so good at vocabulary mastery. Vocabulary mastery plays an important role in the four language skills, and it must be considered that vocabulary mastery is one of the needed components of language (Alqahtani, 2015).

Hakim & Mursidin (2022) mentioned that learning a new language requires developing and memorizing a large vocabulary. Reading, writing, listening, and speaking are the four skills that must be mastered to learn the language. However, the student must first acquire vocabulary to master those four language skills Learners with insufficient vocabulary size will not perform well in every aspect of the language (Susanto, 2017). Mastering the English vocabulary requires not only knowing the meaning of the words but also dealing with the forms, meaning, and use of the words (Salam & Nurnisa, 2021). Vocabulary must be memorized and expressed according to the context of the sentence; therefore, students must know the types of vocabulary itself.

Vocabulary has been discussed and divided into various types, some are divided into two types: active and passive vocabulary (Susanto, 2017). Harmer (1991) distinguished the two types of vocabulary. The first type of vocabulary refers to the vocabulary the students have been taught and expected to be able to use. The second one referred to the words that the students would recognize when they met them, but they would probably not be able to pronounce. Hatch and Brown (1995) classified vocabulary into Receptive and productive vocabularies. Receptive vocabulary means words that learners recognize and understand when they are used in context, but which they cannot produce. Productive vocabulary is words that the learners understand and can pronounce correctly and use constructively in speaking and writing. It consists of what is needed for receptive vocabulary plus the ability to speak or write at the appropriate time (Susanto, 2017). Productive vocabulary can be addressed as an active process because the learners can produce the words to express their thoughts to others (Stuart, 2008). Nation (2001) also divided vocabulary into high, mid, and low frequency, and because academic texts have a distinct usage of vocabulary, Nation (2001) categorized words that are frequently found in academic texts as a different type of vocabulary. According to the explanation above, vocabulary has different levels of difficulty in mastering, that's why vocabulary acquisition must be accompanied by a good process and consistency.

In teaching vocabulary, teachers should have clear learning goals for their students. This is particularly important in the early stages of vocabulary development when increasing vocabulary size will have a significant effect on the degree to which learners can use and understand language. The goals should be dependent on the time available for vocabulary learning inside and outside of the classroom and the methods used for learning (Webb & Nation, 2012). Teaching vocabulary in English as a foreign language (EFL) context is challenging. Incidental vocabulary learning is limited due to a lack of second language (L2) input, and most words are learned through classroom instruction. Overall, research has shown marginal L2 vocabulary growth in many EFL situations. Such research indicates a need for a more effective and efficient approach to teaching vocabulary in the EFL context (Siyanova & Webb, 2016). L2 vocabulary learning progress is often slow and uneven. Whereas native speakers may learn, on average, 1000-word families each year until the age of 20 (Goulden, 1990). This rate of growth is unrealistic in the EFL learning context. This is due to several interrelated factors, such as insufficient input, lack of opportunities to use the language outside the classroom, amount of time dedicated to the English language in general, amount of time dedicated to learning vocabulary, and so on. Students in various EFL contexts, even those studying at a university, may not know some of the high-frequency words found in the first 1000-word families and may know very few words in the second 1000-word families. These learners' vocabulary knowledge can be said to fall far short of what is expected of an EFL learner upon entry into university (Siyanova & Webb, 2016).

One of the strategies English teachers can use to improve student's vocabulary mastery is applying strategies that can help students learn vocabulary. Among many available strategies, a Thinking Map can be applied in the teaching and learning process. David Hyerle introduced eight thinking maps in 1988 comprising circle map, bubble map, double bubble map, tree map, flow map, multi-flow map, brace map, and bridge map. Each thinking map is specific and based on the cognitive processes (Hamzah & Abdullah, 2017). These maps showed specifically the enhancement in different levels of thinking on which map can support and facilitate students to practice and apply which level of thinking explicitly (Hakim, 2018).

Hyerle & Yeager (2007) described the eight cognitive functions of each Thinking Map in increasing students' vocabulary as explained in the following.

1. Circle Maps highlight "Define while in Context". This means that when drafting concepts and brainstorming a thing or object, students must look for words that are related or follow the context. This allows them to search and add vocabulary.
2. Bubble Maps highlight the "Describing" thinking process. It implies that describing something based on adjectives helps increase students' vocabulary in the context of adjectives.
3. Double Bubble Maps highlights the "Comparing and Contrasting" thinking process. It suggests that in comparing dual things, students must find or search for the vocabulary of each of the dual things to be compared.
4. Tree Maps highlights the "Classifying Identifying" thinking process. It says that to classify and identify something, students must make more effort in finding related vocabulary.
5. Brace Maps highlight the "Whole to Part" thinking process. It signifies that identifying the relationship about a component and analyzing it is a complex part to

do, this can increase students' vocabulary by searching further about the parts and its relationship.

6. Flow Maps highlights the “Sequencing” thinking process. It denotes that Ordering an object or event that must be continuous requires a deeper vocabulary that can train students' vocabulary deepening.
7. Multi-Flow Maps highlight the “Analyzing Cause and Effect” thinking process. It shows that analyzing the cause and effect of an event becomes difficult if vocabulary skills are minimal, with the concept of classifying the types of students' vocabulary increase.
8. Bridge Maps highlights the “Seeing Analogies” thinking process. It emphasizes that to make an analogy about something requires good concentration and good vocabulary skills, this makes students become more trained and get a lot of vocabulary.

Thinking Maps or visual tools can provide the students with the ability to think critically as apart from generating ideas, which require analysis and evaluation, they also need to collectively come to the right decision to solve their problem in the task (Omar & Albakri, 2016). In this study, researchers used Thinking maps of the bubble maps type. In this type of map, the emphasis is on the use of maps which are like bubbles. The procedure for implementing this strategy is as follows:

a. The teacher determined the topic according to the material to explain the use of a bubble map, for example "a teacher".
b. The teacher made the empty bubble map on a whiteboard.
c. The teacher asked students to analyze any vocabulary related to the “teacher”.
d. The students answered and the teacher wrote down the student's answers using the bubble map form.
e. In the end, the teacher concludes the lesson using bubble maps to increase their vocabulary.

METHOD

A student's ability to master a wide vocabulary is a key factor in determining how efficiently they will learn English as a foreign language. Aziz & Yamat (2016), “The greatest problem among them all was their ability to remember key vocabulary words in English. Students at SMPN 48 Maluku Tengah had a situation where they lacked vocabulary. To help students improve their vocabulary, the Thinking Map strategy is applied in this study.

The type of research used in this research is Classroom Action Research (CAR). Classroom Action Research is a method of finding out what works best in the classroom that can improve student learning. This research is more systematic and data-based than personal reflection, but it is more informal and personal than formal educational research. The research instruments used are tests, observation, and interviews. The data gained were analyzed quantitatively and qualitatively. The research was conducted at SMP Negeri 48

Maluku Tenggah and the Second-Grade students at VIIIA were selected as the sample of the research

RESULT & DISCUSSION

Vocabulary mastery improvement using the Thinking Maps

Students must be able to commit a large vocabulary to memory to acquire and improve communication skills; this can be a source of strength in developing English language abilities. When someone initiates using a language, the need for vocabulary rises and this attests to the prominence of vocabulary in his or her language use (Yaghoubi & Seyyedi, 2017). If vocabulary mastery increases, other language abilities may also strengthen, which helps speed up language learning, Saragih (2019).

The result showed the improvement of students' vocabulary mastery from the pre-test to the post-test. In cycle 1 20 students took the pre-test 8 students completed adjectives, 6 students completed adverbs, and 5 students completed nouns, The result of the post-test cycle 1 revealed that 15 students completed adjectives, 12 students completed adverbs, and 10 students completed nouns. It had good progress in students' vocabulary improvement. Moreover, the result of post-test cycle II claimed that students' vocabulary mastery had improved well, it indicated that 20 students had completed adjectives, 19 students completed adverbs, and 20 students completed nouns. It meant that 95% of students had improved their vocabulary mastery in adjectives, adverbs, and nouns. Students need to maintain progress to get good outcomes, and this is related to Aziz & Yamat (2016) who stated that students who have little knowledge of vocabulary may face some difficulties in understanding the written language and oral language,

Students' Response learning with the Thinking Maps

After implementing the Thinking maps questionnaires were delivered to the students. There are two types of questionnaires in this research the first is yes/no questions and the second is open-ended questions. The questionnaire aimed to figure out students' responses during learning with thinking maps.

The result described that from the yes/no questions 95% of respondents chose yes on the statements in other words they agree that thinking maps can improve their vocabulary mastery. Thinking maps also help them to use the vocabulary in sentences. Moreover, Thinking Maps can help students' ability to pronounce words. Thinking Maps can help students improve their ability to know the meaning of a word. The Thinking maps support working with friends, and then they will use the Thinking map to increase their vocabulary after this research.

While in open-ended questions all the students gave a positive response. The first question *"How did you feel during the learning process using the thinking maps?"* most of the students answered they felt happy learning with thinking maps because it is easy to understand and simple to use, and this was the first for them, so they felt excited to do it. The second question *"Is there any difficulty that you face in learning using thinking maps?"* Since this strategy was simple to employ and comprehend, the students did not find any difficulty learning with this strategy. The third question *"What advantages do you get when using thinking maps as a strategy to increase your vocabulary"* For this

question most of the students stated that while learning with thinking maps strategy their vocabulary mastery had improved, and they knew what suitable vocabulary is for building a descriptive text. They can use this strategy for daily learning activities to maintain their vocabulary knowledge. It connected with Hakim (2018) Thinking maps assisted students in creating their content, collaborating among pupils in the class, being active and productive, and being a problem and facilitating students with one of their critical thinking skills. Students can benefit from thinking maps as a new strategy that can be explored in any subject and skills besides English. This will build students with creative, innovative, and learners with problem-solving skills, they can construct meaning through expressive and receptive languages.

Students' involvement in the classroom during the learning process

During the learning process using the Thinking maps strategy, the students' activities and interactions were observed. The result of the observation showed that the students did not pay full attention. They only took note of the learning material that had been taught. However, when the students were in group discussions, they were active. They worked with their friends to complete the task and present the results of group discussions. In cycle II, the problems faced in the previous learning were solved by using interest and enjoyable learning. The result showed that in this cycle, students gave more attention and more active in the classroom. They were interested and enjoyed the learning process. They also asked and answered the questions well. In group discussions, they participated actively in completing the task. It is related to Kubaisi and Abdullah, (2018) maps of thinking may help students to become aware of their beliefs, motivate them to challenge them, give them opportunities to express their views, and encourage interaction between students as social cooperative groups.

CONCLUSION & SUGGESTION

Based on the results of classroom action research conducted at SMPN 48 Maluku Tengah in class VIII1 through the Thinking Maps strategy by applying the types of bubble maps carried out in two cycles, namely I and II, it was concluded that students' vocabulary skills had increased, especially in adjectives, adverbs, and nouns. It can be seen in the result of the pre-test 10 students got a "very less" level, 7 students at "less" level, 2 students at level "enough", only one student a "good" level, and no one student at very good level. Result of cycle I there were no students at very good level, 10 students at "good" level, 6 students at "enough" level, 4 students at "less" level, and no one students at "very less" level. On the result of cycle II had significant increase, 8 students at very good level, 10 students at good level, and for enough, less, and very less level there were no students. It revealed that students' improvement from pre-test to cycle I was 5%-55% and then cycle I to II 55%-100%. Meanwhile students' vocabulary improvement at pre-test were 8 students completed in adjectives, 6 students completed in adverb, and 5 students completed in noun. Compared with cycle I were 15 students completed in adjectives, 12 students completed in adverb, and 10 students completed in nouns. On the other hand, the significant increase happened in cycle II were all students completed in adjectives, 19 students completed in adverbs, and all students completed in nouns. It indicated that students had vocabulary improvement. Additionally, the result of the questionnaire described that students felt happy to learn with the Thinking Maps strategy,

with this strategy they can improve their vocabulary knowledge which can be a strategy to use in their learning activity in making descriptive text. This is because Thinking maps can organize students' ways of thinking to determine problem topics based on their understanding. In this study, students worked together in groups to find and arrange their vocabulary so that there was positive interaction in solving problems and increased their vocabulary mastery.

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