



Implementation of Mind Mapping Technique in Teaching Vocabulary

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Abstract

The aim of this study was to find out the effectiveness of using the mind mapping technique to teach vocabulary. The subjects of this study were 30 students of fifth semesters Students of Islamic Education for Early Childhood Department of Islamic Institute of Qamarul Huda in the academic year 2020/2021. This study uses the quantitative method by using a descriptive approach. The data was obtained by using pre-test and post-test and observation. The data were analyzed statistically and described descriptively. This study found that the percentage of students' ability in a pre-test in lower ability was 57 %, the medium ability was 30 %, the high ability was 10 % and excellent was 3 %. Furthermore, after giving treatment the percentage of students' ability in post-test in lower ability was 0 %, the medium ability was 6,66 %, and high ability was 83,33 % and excellent was 10,01 %. The average score of students increased the total score in pre-test was 1807 and in the post-test was 2458. The average scores both in pre-test and post-test increased in pre-test 60, 23 and post-test was 81, 93. The percentage of students' achievements of all criteria on post-test was, in first criteria, the percentage of excellent was 7 %, in the high criteria was 83 %, the medium was 10%, and in the low criteria was 0%. Hence, using the mind mapping technique was very effective in building and scaffolding the student's vocabulary mastery. And also the mind mapping technique helps the students in using their left and right brain in learning vocabulary.

Keywords: *Mind Mapping; Vocabulary; Teaching*

Introduction

Acquiring and memorizing a lot of vocabulary becomes an integral part of learning a foreign language, not only learning English but also learning all languages in the world. To learn the language some skills, have to be acquired by the learners namely; reading, writing, listening, and speaking. But, to master those four language skills, the learner has to learn vocabulary at first. It caused, to convey an idea the learners need to memorize a lot of vocabulary in their mind. Further, how people can understand what they read if they do not know the meaning of words and how can people write if they do not know any single words to write. So, having a lot of vocabulary was being an important part of learning a language (David Wilkins in Thornbury, 2002). In addition, nothing can be conveyed without vocabulary.

As we know too, the important vocabulary in our daily life and while process of learning the language. If the people do not understand with the words, phrases, or utterances spoken, they can't

communicate well. So, English learners must memorize a lot of vocabulary in their minds. It caused The number of words that students need to learn to be exceedingly large; on average students should add 2,000 to 3,000 new words a year to their reading vocabularies (Beck, McKeown & Kucan, 2002 in Bauman, 2004; 94). The number of words that students must learn and memorize in a day averages six or eight even more to make their vocabulary mastery increase. Percentage the of students who learn perhaps 1000 words per year it is meaning the students has increased 30 percent (Sthal ,1999).

Learning vocabulary means learning words because words represent complex and often multiple meanings that complexes and multiple meanings of words need to be understood in the context of other words in the sentences and paragraphs of texts. It is because vocabulary is the obvious component of language (Richard (2001). Furthermore, Hayes, Wolfer, & Wolfe (1996) in Kamil & Hiebert (2005) explained that the students are expected not only to comprehend words in texts but also texts can be expected to introduce them to many new words. In addition, Morra & Camba (2009) pointed out that nowadays it's widely accepted that vocabulary learning is one of the essential elements both of acquisition of one's native language and of learning a foreign language

Teaching and learning tenets have to be taken into account as the guidance of the teacher in the teaching process. Hornby (1995) in Rohania (2010) pointed out that "teaching means work of teacher". In the line of the teaching vocabulary, Nunan (1991) explained that teaching vocabulary regains an important place in the language classroom, the issues, principles, and practice reviewed will become increasingly useful and significant. In addition, Nunan (2003) mentioned the principles for teaching vocabulary; a) focus on the most useful vocabulary, b) focus on the vocabulary in the most appropriate way, c) give attention to the high-frequency words across the four strands of the course, d) encourage the learners' language reflect on and take responsibility for learning.

Looking at the importance of English as a foreign language to young learners, Nugroho (2007: 15 cited in Budiman, 2014: 4) explained that, "the teaching principles will very influence to the foreign language learners' understanding toward the material taught. That is the reason; the teaching must be based on an appropriate strategy referred to the teaching principles, so that the learners, through a good teaching process and structurally transferred will gain a good English foundation."

In teaching and learning vocabulary, the processes have to be based on the appropriate strategy referred to as the teaching principles. So, there were several types of techniques that can be used by the teacher to teach. In sum, the need for strategy strongly could not be avoided. Further, one of those strategies was using mind mapping to develop the students' vocabulary mastery.

The Mind mapping technique is one of the approaches that make use of the entire brain in learning and can help students enjoy and be more interested in learning English, particularly vocabulary. "A mind mapping is a graphic organizer in which the major categories radiate from a core notion and sub-categories are depicted as branches of bigger branches, (Al-Jarf, 2011 cited in Sahrawi, 2013). Further, the technique of mind mapping is a strategy to comprehend a concept, whether its business plan or lesson which is studied by students or teachers. It's also used as a tool to help students to read and describe a concept. Using the mind mapping technique will stimulate the students' brains in exploring what words are in their minds. It is in line with Hofland (2007), who expounded that mind mapping is a technique that stimulates both parts of the brain; the left side is used for rational and logical thinking whereas the right side is used for creative thinking. So, it believes that it can help them to acquire and memorize a lot of vocabulary. In addition, mind mapping can assist someone in learning, organizing, and storing as much information as possible, and when done correctly, it allows for easy access (Buzan, 2009). He also mentioned that appealing to diverse learning styles, such as visuals, can help students to consider connections in their subject. They make students use both sides of their brains.

Moreover, the mind mapping technique works as a visual map of ideas, laid out in radial format around a central thought, and it involves a unique combination of imagery, color, and visual-spatial arrangement which is proven to significantly improve recall when compared to the conventional method of note-taking and learning by rote (Buzan, 2009). Jaimie (2006) adds, the mind map technique is created around a single word or text, placed in the center, to which associated ideas, words, and concepts are added.

In addition, Buzan (2009) explains the steps how to make mind mapping namely; 1) Take a piece of white paper and it is in a landscape position, 2) Start by drawing a colored image in the center of the paper and write the keyword with capital letters, 3) Choose a color and draw the main themes of the mind mapping on the thick branches radiating out from the central image, 4) Add other main themes branches around the map, 5) Make thick and colorful branches spanning out from your mind map, 6) Write basic ideas about the keyword and still use the capital letters, 7) Add an image to all the main branches to represent each key theme and also use images to visualize every important keyword on your map and, 8) Let your mind mapping be as imaginative as possible.

Furthermore, the learners need not only to study a lot of words but also to remember them (Thornbury, 2002; 23). Using mind mapping to teach vocabulary means using the memory sensory. So, the learners need to balance using the left side brain and right side brain to think perfectly. The Right side brain is used for creativity and visualization, while the left side brain is used for logical and rational. Hence, the Mind mapping technique combines both the right side and left side brain. It stimulates the brain by appealing to both the creative and logical sides of the brain.

In short, Mind mapping is a fun technique that uses to express the idea by making an endless number of connections in your head. The freedom to wander the unlimited expanse of the brain is provided via mind mapping. Every keyword that is added to a mind map gives the possibility of a new and larger range of associations. As a result, the researcher believes that teaching vocabulary by mind mapping is particularly effective for both teachers and students in the teaching-learning process, as it improves the classroom ambiance and increases students' vocabulary knowledge.

In line with vocabulary teaching, several studies have been conducted. First, a study conducted by Ellmathi (2011) revealed that semantic mapping strategy could be used in reading comprehension. Second, Housen (2010) found that words mapping strategy has a significant impact on vocabulary learning. Third, a study in Indonesia by Rohania (2003) discovered that using semantic mapping strategy was effective in teaching vocabulary.

This recent study believed that using the mind mapping strategy not only scaffolds the student's vocabulary mastery but also leads them in using their brain, left side, and right side. Teaching and developing students' vocabulary by using the mind mapping technique also build students' prior knowledge to learn vocabulary independently and properly. So, this study focused on gaining the effectiveness of the student's vocabulary mastery using the mind mapping technique.

Methodology

This study aimed to find out the effectiveness of using a mind mapping strategy to teach vocabulary. The method was quantitative by using a descriptive approach. To obtain the data, this study used Pre-test, post-test, and observation. The subjects of this study were 30 Students of the fifth semester of Islamic Education for the Early Childhood Department of Islamic institute of Qamarul Huda in academic years 2020/2021. Then, the data were analyzed statistically and described descriptively.

Finding and Discussion

a. Finding

To gain the real ability of the student's vocabulary mastery, the pre-test was given before conducting treatment. Then the data was transformed into a table and diagram. The result of the student's vocabulary mastery both in pre-test and post-test was presented in table 1 below.

Table 1 The score of Students' vocabulary Test in pre-test and Post-test

No	Student's score	Post-test	Post-test
1	Total score	1807	2458
2	Mean	60,23	81,93
3	Median	91,5	81
4	Modus	55	85
5	Std. Deviation	13,74	8,024
6	Variance	188,87	64,40
7	Range	55	25
8	Minimum score	40	75
9	Maximum score	95	100
10	Frequency	30	30

In addition, to see the percentage of student's qualification in mastering vocabulary, then, in the table 2 presented the percentage of qualification result in both pre-test and post-test.

Table 2 The Percentage of Students' vocabulary mastery in pre-test and Post-test

Qualification	Score ranges	Pre-Test		Post- Test	
		Percentage		Percentage	
		Frequency	%	Frequency	%
Excellent	86 - 100	1	3, 33 %	3	10, 01 %
High	76 - 85	3	10, 01 %	25	83, 33 %
Medium	56 - 75	9	30, 00 %	2	6,66 %
Low	0- 55	17	56, 66 %	0	0, 0 %
Total		30	100%	30	100%

Figure 1 showed the frequency of students' vocabulary mastery before conducting treatment to the class. This was a result of students' test in pre-test.

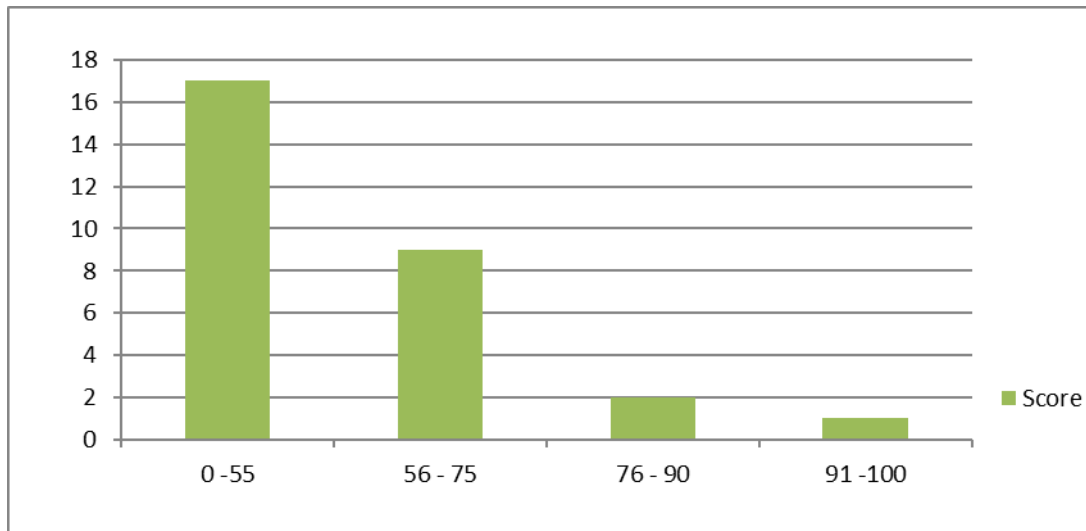


Figure 1 The Frequency of Students' vocabulary mastery in Pre-test

In addition, the figure 2 presents the student's vocabulary mastery after conducting teaching and learning process.

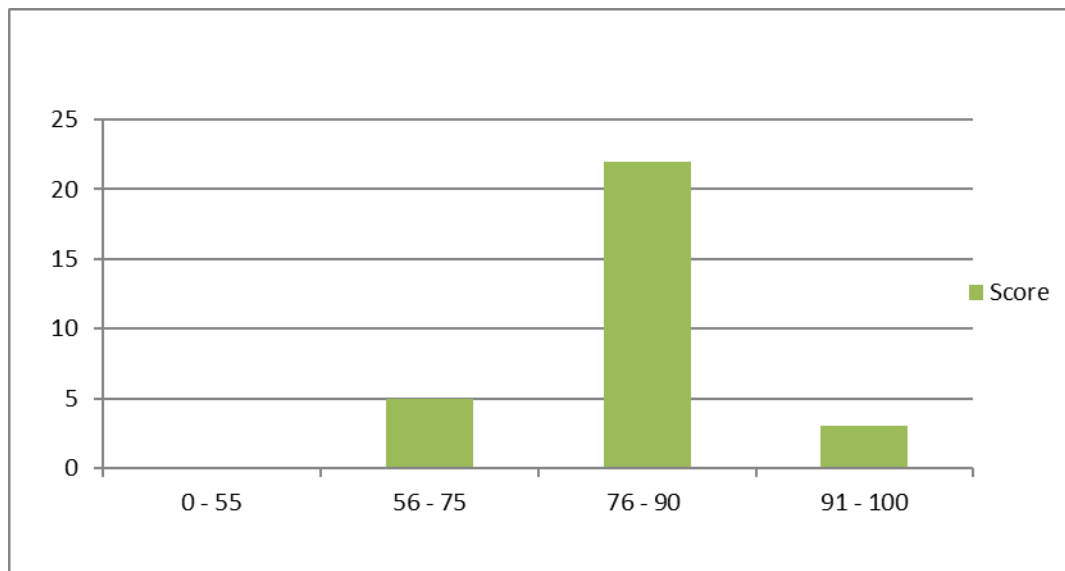


Figure 2 The frequency of Students' vocabulary mastery in Post-test

To know the percentage of student's vocabulary mastery in pre-test, here were presented in diagram pie 1.

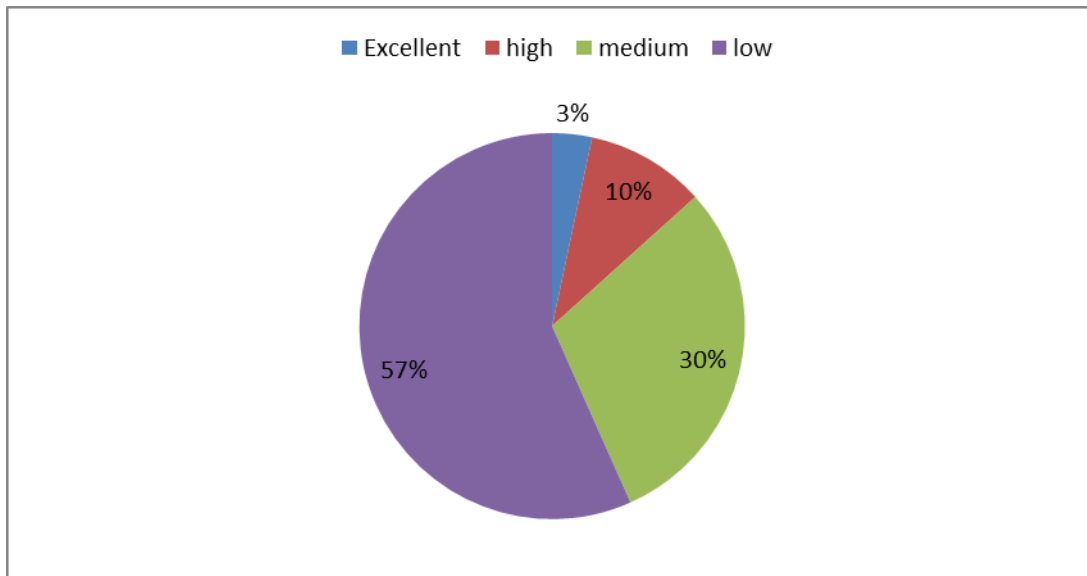


Diagram 1 The percentage of student's vocabulary mastery in pre-test

In the diagram pie 2 below presents the percentage of student's vocabulary mastery after conducting teaching and learning.

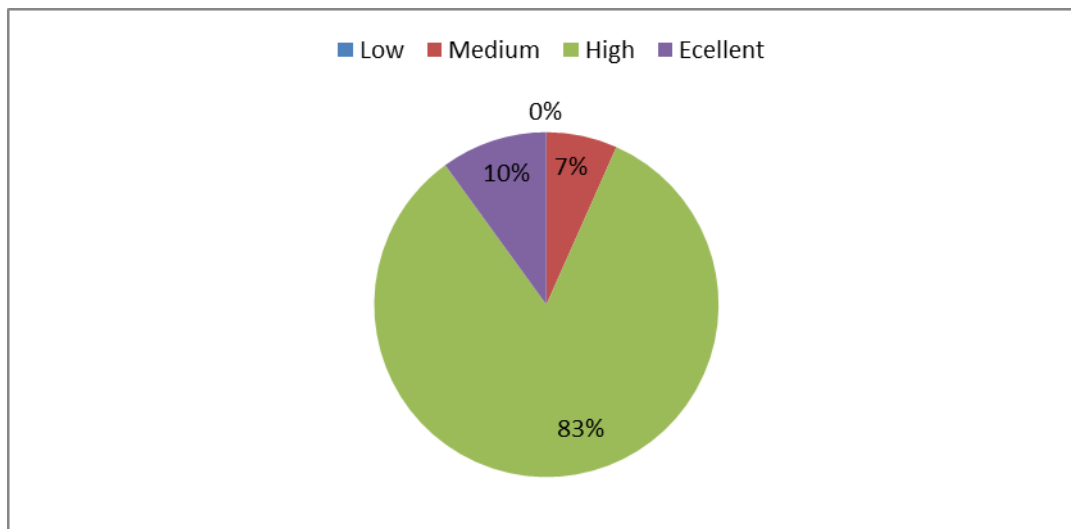


Diagram 2 The percentage of student's vocabulary mastery in post-test

The aspect investigated while the teaching and learning process was recorded in the observation sheet as shown in the table 3. Observation was conducted while the teaching and learning process. There were several aspect investigating namely; activeness, discipline, responsibility and enthusiasm. Then, diagram pie present the percentage of data observation.

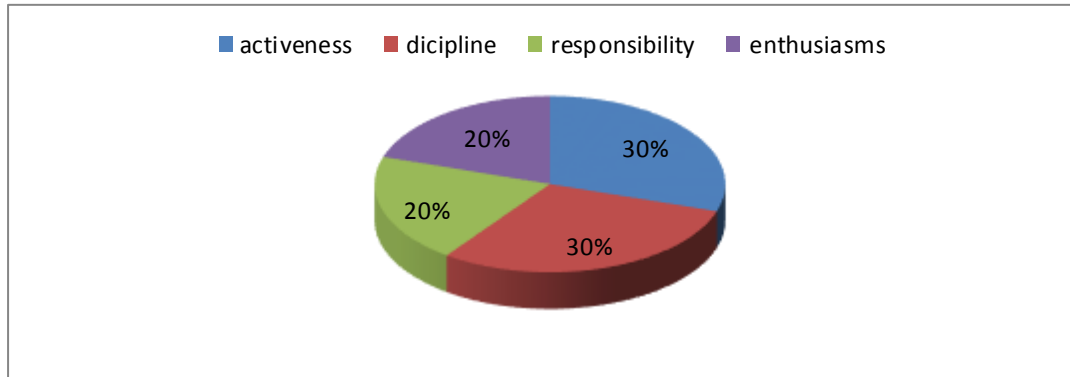


Diagram 3 The percentage of students' observation

b. Discussion

As mentioned earlier the pre-test was given by the researcher by mean to gain the real ability of students in understanding the words. And also it was aimed to know the student's vocabulary mastery as detail as possible. As shown in table 1, the total score of students was were 1807 and the score averages were 60, 23 of 30 students. Then, the lower score was 40 and the maximum score was 95, which means that the range was so high, it was 55, and score 55 was shown in very high frequency. It means that their ability was very weak.

In addition, as shown in figure 1 the frequency of low scores was so high, the range score from 0 – 55 was gained by 17 students, medium score (range 56 – 75) were gained by 9 students, high score range from 76 – 85 were gained by 3 students and only one student reached very high score it was 95. Further, to see the percentage of students' ability was presented in diagram 1. The low ability was 57 %, the medium ability was 30 %, the high ability was 10 % and the very high or excellent was 3 %.

Furthermore, after giving treatment the average score of students was increasing as shown in table 1. The total score in the pre-test was 1807 and in the post-test was 2458. While the average score both in pre-test was 60, 23 and post-test was increasing 81,93. As present in diagram 3, the percentage of students' achievement in all criteria was, in first criteria, the percentage of excellent was 7 %, in the high criteria was 83 %, the medium was 10%, and in the low criteria was 0%. It was mean that the implementation of mind mapping on the students of the fifth semester at Islamic Education for Early Childhood was effective in building and scaffolding the student's vocabulary mastery. And also, the mind mapping technique helped students to use their left and right brain in learning vocabulary.

According to the findings of this study, the researcher believes that mind mapping is a technique that can help students be more creative. "Mind mapping is a technique that stimulates both sides of the brain (Hofland, 2007). The left side is used for rational and logical thinking, while the right side is used for creative thinking." Furthermore, mind mapping can be used as a fun, effective, and easy way to take notes for learning (Buzan, 2009).

Vocabulary is one of the language elements that not only supports the use of the other aspects of language (pronunciation, spelling, and grammar), but also makes the four language skills easier to use (listening, speaking, reading, and writing). Learning vocabulary is a vital aspect of language learning, but it is not an easy task. The low vocabulary score observed in the pupils' achievement does not imply that no attempt is being made to address the problem. Both teachers and students have attempted to teach and learn vocabulary using various ways and methodologies. However, numerous elements are thought to have an impact on the teaching and learning process, such as student traits, resources, and teachers' personalities. Students with limited vocabulary will have difficulty understanding written and

conversational language. According to Dellar and Hocking (in Thornbury, 2002), If you spend the majority of your time studying grammar, your English will not improve significantly.

Finally, the findings of this study can assist English teachers in using this technique to teach vocabulary, and teachers can switch from their old methods to new, more engaging methods. Furthermore, the findings of this study may encourage pupils to improve their vocabulary abilities. The use of mind mapping to teach vocabulary might help pupils relax and enjoy the learning process.

Conclusion

The language learners need to balance using the left side brain and right side brain to think perfectly. The Right side brain is used for creativity and visualization, while the left side brain is used for logical and rational. Hence, this study shows that teaching vocabulary using mind mapping was able to stimulate the students independently to learn vocabulary. This can be shown based on the result of the study both pre-test and post-test. The total score in the pre-test was 1807 and in the post-test was 2458. While the average score both in pre-test and post-test was increasing 60, 23 to 81, 93. Mind mapping strategy is also can be used by another researcher to find out more specific aspects of learning vocabulary in different areas and subjects.

Finally, to master the English language the learners need to acquire the major skills; reading, listening, speaking, and writing, but they have to master vocabulary context. In short, the teacher has to use more fun and creative to teach the learners, in the order they more creative in learning its.

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