The Use of Word Mapping Strategy to Enhance Vocabulary Skills among Thai EFL Junior High School students

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Abstract

The objective of this study is to investigate the effectiveness of using the Word Mapping Strategy for enhancing vocabulary skills of junior high school students at Bankuanprakob School, Phatthalung Province, Thailand. This research employed quantitative method through the pre-test and the post-test. It is intended to describe systematically based on the data that has been collected from the tests. The sample include 20 junior high school students, grade 9, studying in Thai public school in the 2022 academic year. The statistics used for the data analysis is the minimum, maximum, mean, standard deviation, and paired-sample t-test, The results indicate that 1) the post-test total mean score, at 19.10, is higher than the pre-test, at 12.25. The difference between the total mean score of the pre-test and the post-test is 6.85. These findings prove that there is a statically significant difference between the pre-test and post-test mean scores at .05. The increasing scores of the students' post-test show that the vocabulary skills of junior high school students are improved significantly after applying the Word Mapping Strategy. The research suggests that English teachers could apply the Word Mapping Strategy for teaching vocabulary as an effective way to make students easy to understand.

Keywords: Word Mapping Strategy, Vocabulary Skills

Introduction

Along with globalization, English as the international language of communication plays an increasingly important role in many areas. The worldwide influence of English as a lingua franca has put the importance of research in the second (L2) and foreign language (FL). English becomes one of the most important tools in communication and it is used as the tool of communication among nations all over the world. The importance of English is reflected in education, and it is considered as the foreign language and taught formally from elementary school up to the university level in Thailand. It is taught in every school, institution, and university in Thailand in both public and private ones. The national core current curriculum proposed by the Ministry of Education requires students to study

English for 12 years from grade one to grade twelve (Ministry of Education, 2008) According to Sujayanti (2017), the aim of teaching English in junior high school level is to motivate them to be ready and have self confidence in learning English at a higher level of education. By having a very good built-up English skills among Thai students, students must master their vocabulary as greater as possible in learning language because vocabulary is a part of a language that is very important in the learning process, and vocabulary will not be separated from the other parts in English such as speaking, writing, listening, and reading. Mastery of vocabulary is one of the most essential parts and it is the basis of learning languages (Pan & Xu, 2011) Rohmatillah (2017) asserted that without learning the vocabulary, learning English becomes harder. To learn vocabulary, a plenty of strategies are currently employed in Thai schools from contemporary approaches to more modern ones, and the Word Mapping Strategy is addressed as one of the most interesting and effective ways in both teaching and learning English vocabulary. According to Graves (2008) the Word Mapping Strategy is one of the ways to approach teaching vocabulary because it makes the students explore word relationships. This strategy shows that the concept emphasizes the words. The Word Mapping Strategy is useful for developing a common meaning in certain words. Therefore, this research is aimed at enhancing the students' vocabulary skills at Bankuanprakob School, Phatthalung Province, Thailand, because the researchers find that most of the students have their problems in learning English because of a complete lack of vocabulary skills.

Statement of the problem

The results of observing students at Bankuanprakob School in the first semester in academic year 2022 showed that students feel difficult to spell, pronounce, and memorize the meaning of words. Students are confused when they combine and apply some words in conversation and writing. From this phenomenon in the classroom, it could be concluded that the main problem occurs by students because of low vocabulary skills among those students.

Objective

To investigate the effectiveness of the Word Mapping Strategy for enhancing vocabulary skills of junior high school students, grade 9, at Bankuanprakob School, Phatthalung Province, Thailand

Research Question

Is the Word Mapping Strategy effective in enhancing vocabulary skills for junior high school students, grade 9, at Bankuanprakob School, Phatthalung Province, Thailand?

Literature Review

The Word Mapping Strategy is a teaching method to teach vocabulary because it can involve the students to think critically about the words (Qomariyah & Nafisah 2020) This strategy can help the students to develop general concept of words. This strategy focuses on three questions like "what is it?", "what is it like?" and "what are some examples?" These questions have a meaning separately to make the students aware of the types of information that can form a definition of something and how to arrange the information. The Word Mapping Strategy has three boxes that explain about the words from the definition, synonyms, antonyms, or part of speech according to Schwart and Raphael (1985)

Many researchers agree that using the Word Mapping Strategy can help students enhance vocabulary skills. The researchers take some of the related studies that also focused on increasing the vocabulary skills by using the Word Mapping Strategy in teaching and learning English. In this respect, Humaira and Humaira (2015) studied on 79 students of first grade students of SMAN 8 Mataram in Academic Year 2014/2015 in Indonesia on the title "The Effectiveness of Using Word Mapping Technique to Increase Student Vocabulary." The data analysis of the research showed that the Word Mapping Strategy was effective in teaching vocabulary. The researcher stated that word maps technique helped the students to learn about words through mapping because of the word mapping helps them examine the characteristics of words such as concepts, and categorization, relationships.

Likewise, the second research from Widyawati (2016) which entitled "Investigating the Impact of Word Mapping on the Students Vocabulary Achievement and the Students' Perception at Junior High School Level" demonstrated the effectiveness of using word mapping strategy in teaching English vocabulary. This research focused on the students' vocabulary achievement improvement by implementing modified word mapping for SMPN 20 Bandar Lampung. By taking the sample form the students of VII E and VII F, the research showed the significance of improvement that the students' vocabulary achievements taught by word mapping were increased. The results also revealed vocabulary achievement that there was a significant difference of the students' vocabulary achievement between the experimental and the control class. Focusing on the results, students' vocabulary achievement in the experimental class was better than that of the students in the control class. From these two studies, they insist that the teaching of word mapping can promote students' vocabulary achievement. This happens due to the fact that word mapping can help students to develop their mastery of vocabulary.

Methodology

This research was conducted to enhance students' vocabulary mastery by using the Word Mapping Strategy. The research was experimental investigation by using the pre-test and the post-test on vocabulary skills as the main instruments of data collection. Samples purposely were 20 junior high school students, grade 9, at Bankuanprakob School, located in Kongra Phatthalung Province, Thailand. The students were studying the course of BE 23102 in the academic year 2022. The study was conducted in two semesters of the academic year 2022. The intervention period was from the fourth week of November until the second week of January in 2022. The test given was in a form of a multiple-choice and rearrangement test to measure how effective the strategy is to improve students' vocabulary.

The test

The test was to assess the learners' acquisition of the vocabulary skills of 3 chapters, Family Relationship, an Emergency, and Healthy Living. It consisted of 30 questions, the test was divided into 3 parts: multiple choices for definition, part of speech, and rearrangement of sentences. Each item of multiple choices includes options a, b, c, d. Then, the students chose the correct answer. The pre-test is administered before the treatment in the first week, and before utilizing the Word Mapping Strategy. The learners' outcomes were recorded for further correlation to the scores of the post-test, which was administered at the eighth week.

Data Analysis

The obtained data from the pre-test and post-test was analyzed by a computer SPSS software, version 20, on the minimum, maximum, mean score ($\bar{x}$), standard deviation (SD), and paired-samples T test. The comparison of the scores between the pre-test and the post-test was discussed as the results of the analysis for the findings.

Results

Table 1: Descriptive Statistics of the pre-test and the post-test

Descriptive Statistics						
	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Pretest	20	4	20	12.25	1.005	4.494
Posttest	20	11	29	19.10	1.095	4.898
Valid N (listwise)	20					

According to table 1, the minimum score of the pre-test is at 4, while the post-test one is at 11; the minimum score of the pre-test is at 20, and the post-test one is at 29. The result of the pre-test mean score is at 12.25 and the mean score of the post-test is at 19.10 respectively, which is higher than the pre-test at 6.85. It is considered as a good improvement of students' vocabulary skills.

Table 2: Paired Sample Statistics

Paired Samples Statistics		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	12.25	20	4.494	1.005
	Posttest	19.10	20	4.898	1.095

From table 2, it shows the mean score of the pre-test and the post-test are at 12.25 and 19.10 respectively. The standard deviation of the pre-test and the post-test are at 4.49 and 4.89 respectively. The mean score of the post-test is obviously higher than the one from the pre-test, meaning that using the Word Mapping Strategy could increase students' vocabulary skills.

In order to prove the research hypothesis, the researchers analyze the data through the paired sample test as follows.

Table 3: Paired Sample Test

Paired Samples Test								
Pair 1 Pre-test - Post-test	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
	-6.850	1.565	.350	-7.583	-6.117	-19.571	19	**.000**

To meticulously look at the different outcomes between the pre-test and the post-test, two statistical hypotheses are designed in the following models:

1. H_0: $\mu_{Pre-Test}$ - $\mu_{Post-Test}$ (The outcomes of the pre-test and the post-test *are not different*.)

2. H_1: $\mu_{Pre-Test}$ - $\mu_{Post-Test}$ (The outcomes of the pre-test and the post-test *are different*.) In order to test which hypothesis is accurate and answer the research hypothesis or not, the P value (possibility) is set at .000, and the alpha (significant) is set at .05. Hence, the P value (Sig .000) must be less than .05. From the table above, it illustrates that the "t" is

at -19.571 and the Sig is at .000, which is clearly less than .05. This indicates that the P value rejects H_0, but it accepts H_1 instead. Therefore, from the data on table 3, it can be summarized that after the implementation of the Word Mapping Strategy, the students' vocabulary skills have statistically significant difference at .05, meaning that the teaching of vocabulary of 20 junior high school students by the Word Mapping Strategy could enhance their vocabulary skills.

Discussion

After experimenting with teaching vocabulary by using the Word Mapping Strategy, the researchers see the mean score in the pre-test, at 12.25, and the mean score in the post-test, at 19.10. Then, the researchers continue to calculate the data, so the researchers conclude that the data is significantly different, at 6.85. It can be concluded from the data that using the Word Mapping Strategy in the learning process in English classroom has a significant effect on enhancing vocabulary skills among Thai junior high school students. The standard deviation of the pre-test and the post-test is distributed to indicate that the Word Mapping Strategy is meaningful for the students both with high and low achievement ones. In addition, the significant difference between the pre-test and the post-test mean scores in terms of statistics at .000, at a significant level (p<.05), shows that the gained score of the post-test which is given as a result of using the Word Mapping Strategy as a treatment can be concluded from the data that this strategy employed in the learning process in English classroom is effective for enhancing vocabulary skills for the students. Thus, the increase of the mean score of the post-test answers the research question and proves the research hypothesis well.

As the findings of this study are highlighting the positive results of the Word Mapping Strategy for teaching vocabulary skills of Thai junior high school students at Bankuanprakob School, they can be suggested that using the Word Mapping Strategy for teaching vocabulary has great impact on students' vocabulary achievement. The findings of this research are similar to the finding of Juniarni (2020) under the title "The effect of using word mapping Strategy to the students' vocabulary mastery at SMPN 15 IT Binjai, Indonesia," who showed that there was the advancement of the mount of students' vocabulary skills by using the word mapping strategy as it showed the mean score in experimental class was 65.89 and the mean score in control class was 56.10. Based on the analysis data in VII grade students at SMPN 15 IT Binjai, there is a significant effect on the student's vocabulary mastery who are taught by using word mapping strategy. The data from the test divided on the pre-test and post-test indicated that students those were taught by using word mapping strategy had a higher score than the students those who were taught without word mapping strategy.

Ultimately, the researchers suggest that the Word Mapping Strategy should be addressed as one of the most potential language teaching methods for English classes, where learners or students' vocabulary skills need to be enhanced.

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