# ผลกระทบของการใช้บัตรคำศัพท์ที่มีต่อความรู้คำศัพท์ของนักเรียนระดับชั้นประถมศึกษาปีที่ 5 โรงเรียนบ้านสาวะถี
# The Effects of word cards Strategy on Vocabulary Knowledge of Grade 5 Elementary Students at Bansawathi School

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## บทคัดย่อ

งานวิจัยนี้มีจุดประสงค์เพื่อศึกษาผลกระทบของการใช้บัตรคำศัพท์ที่มีต่อความรู้คำศัพท์ของนักเรียนระดับชั้นประถมศึกษาปีที่ 5 โรงเรียนบ้านสาวะถี และการรับรู้ของนักเรียนที่มีต่อการใช้บัตรคำศัพท์ เครื่องมือที่ใช้ในงานวิจัย ประกอบด้วย แบบทดสอบคำศัพท์ก่อนเรียนและหลังเรียน และแบบสอบถามการรับรู้ของนักเรียนที่มีต่อการใช้บัตรคำศัพท์ คำศัพท์ที่นำมาใช้ในงานวิจัยนี้ได้คัดเลือกมาจากบัญชีคำศัพท์ของกรอบมาตรฐานการประเมินความความสามารถทางภาษาจากประเทศในกลุ่มสหภาพยุโรป (CEFR) ระดับ A1 ผลจากการแบบทดสอบคำศัพท์ก่อนเรียนและหลังเรียน พบว่า การใช้บัตรคำศัพท์ช่วยพัฒนาความรู้คำศัพท์ของนักเรียนทั้งในด้านของการจดจำคำศัพท์, การจดจำความหมายของศัพท์, และการใช้คำศัพท์ ผลจากแบบสอบถามการรับรู้ของนักเรียน โดยรวมพบว่า นักเรียน

มีการรับรู้ในเชิงบวกต่อการใช้บัตรคำศัพท์ ในด้านความพึงพอใจต่อการใช้บัตรคำศัพท์พบว่า นักเรียนพึงพอใจอย่างมากต่อการใช้บัตรคำศัพท์ ในด้านประโยชน์ของการใช้บัตรคำศัพท์ พบว่านักเรียนรับรู้ว่าการใช้บัตรคำศัพท์มีประโยชน์ และในด้านการใช้บัตรคำศัพท์พบว่า นักเรียนรับรู้อย่างมากต่อการใช้บัตรคำศัพท์

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## Abstract

This research aimed at investigating the effects of word cards strategy on vocabulary knowledge and perceptions of grade 5 elementary students at Bansawathi School. The instruments used in this study were: the vocabulary pretest and posttest, and the questionnaire on the perceptions on word cards strategy. The vocabularies used in this study were selected from the Common European Framework of Reference for Language (CEFR)'s A1 English vocabulary list. The results from the vocabulary pretest and posttest revealed that the use of word cards strategy helped improve the students' vocabulary knowledge in terms of the recognition of forms, the recognition of meaning, and the use of vocabulary. The overall results from the questionnaire revealed that the students had positive perceptions on word cards strategy. In satisfaction aspect, the students were highly satisfied with word cards strategy. In word cards utilization, the students perceived that word cards strategy was useful and they learned a lot from word cards strategy.

**Keywords  :** Word Cards, Word Cards Strategy, Vocabulary Knowledge

## Introduction

Vocabulary knowledge is a core component of all language skills that a learner who has a large vocabulary will be able to develop skills in reading, listening, writing and speaking (Richards, 2015). According to Laufer (1992) and Nation (2005), there are high relationship between vocabulary and all language skills especially for English as second and foreign learners that the learners' abilities are depended on vocabulary knowledge.

It could be seen that vocabulary knowledge is essential for both English as second language learners and English as Foreign language learners that they have to learn since in order to master language, vocabulary learning is an essential part (Schmitt, 2010). In conclusion, vocabulary knowledge is important for those who want to master language, and to be able to use all language skills.

From various studies, vocabulary knowledge affected learners' language ability. According to Oxford (1990), language learners who cannot remember the large amounts of vocabulary would have a problem on fluency achievement. Schouten-van Parreren (1989) found that learners with restricted vocabulary knowledge had difficulty integrating and generalizing knowledge from words they have already learned to the new ones. Similarly, in Thailand, the students seem to have limited knowledge of vocabulary. According to the National Institute of Educational Testing Service (NIETS, 2017), the average scores of the Ordinary National Education Test (O-NET) of English of students in grade 6 primary school were lower than 50 percent in the past years due to inadequate English vocabulary knowledge. Moreover, Watcharapichitchai (2012) found that Thai elementary school students lacked vocabulary knowledge that they cannot retain the meaning of the vocabulary they learned, and they cannot make use of the vocabulary because they cannot retain its form. Therefore, it could be seen that inadequate vocabulary knowledge has negative effects on students that they need vocabulary learning.

Schmitt (2010) stated that vocabulary learning is an essential part for those who want to master language. In addition, for vocabulary learning, the strategy to be used is also important. According to Catalán (2003), vocabulary strategy is defined as the process as well as steps or actions the students used in order to learn vocabulary to find out the meaning of unknown words, to retain them in long-term memory, to recall them, and to use them in speaking or writing. Nation (1990) also stated that for learning a word, vocabulary strategy must be added. As to Hedge (2000), apart from explaining new words, one of the important roles of the teachers is to teach effective strategies. Accordingly, students should learn vocabulary strategy in order for them to learn vocabulary.

One of the effective strategies used in vocabulary learning is word cards strategy. According to Nation (2001), word cards strategy is the strategy that learners

make a set of cards that each card contains the word to be learned on one side of the card and its first language translation on the other side. The cards are kept in packs held together by the rubber band, and when the learners have a few moments, they go through the cards recalling the meaning. By using word cards, it helps learners to learn the written form of the word, the concept of the word, and to make the connection between form and meaning. It can also be used for receptive and productive learning. Moreover, learners could learn a large numbers of words in a very short time by using word cards (Nation, 2001).

Even though word cards strategy has been used for decades, nowadays there still are many researchers using this strategy in order to improve vocabulary knowledge of learners both in ESL and EFL contexts. Komachali and Khodareza (2012) investigated the effects of using vocabulary flash card on Iranian pre-university students and found that learning vocabulary through cards lead to a better learning of vocabulary. According to Kuo and Ho (2012), word cards strategy was implemented with Taiwanese EFL junior high school students. The result showed that word cards strategy is effective and affects students' vocabulary knowledge. In 2016, Diaz (2016) investigated the changes in the amount of English vocabulary knowledge beginners can learn using flashcards. The result showed that the use of word cards helps improve vocabulary knowledge. Perez and Alvira (2016) applied word cards strategy on EFL low level proficiency learners. The result showed that word cards strategy helps learners to expand their range of words, develops the ability to retain words and recall them, and gives learners a sense of improvement. From these previous studies, it could be seen that word cards strategy is still effective for vocabulary learning. Therefore, in order to improve vocabulary knowledge, word cards strategy is still able to be used.

For Thai elementary students at Bansawathi School, English is one of compulsory subjects throughout their entire educational system that they have been taught since they studied at kindergarten. However, grade 6 students' English mean score of the Ordinary National Education Test (O-NET) is still low. In the academic year 2018, the average score was 38 percent (NIETS, 2018). This is because the students lack vocabulary knowledge. In order for Thai elementary students at Bansawathi School to learn vocabulary and improve vocabulary knowledge effectively, word cards strategy should be applied as Nation (2001) stated that students could successfully learn large

number of words in very short time by using word cards. In addition, vocabulary learning is an incremental process that involves frequent encounters with words and their uses over time that learners have to meet the words repeatedly many times (Richards, 2015) which is congruent with how word cards strategy works that whenever learners have a few moments; they could go through the cards recalling the meaning themselves (Nation, 2001). Moreover, as to Watcharapichitchai (2012), word cards strategy was used to improve Thai elementary school learners' vocabulary knowledge. The result showed that the learners' vocabulary was improved after using word cards strategy. With regards to previous studies as presented, vocabulary knowledge is very important for students in order to learn or master second language, and the strategy to be used is also important. The present study, therefore, aims to make use of word cards strategy with Thai elementary students at Bansawathi School in order to improve their vocabulary knowledge.

## Purposes of the Study

1. To investigate the effect of word cards strategy on Thai elementary students at Bansawathi School's vocabulary knowledge

2. To investigate Thai elementary students at Bansawathi School's perceptions on word cards strategy

### Research Questions

1. To what extent does Word Cards Strategy enhance vocabulary knowledge of Thai elementary students at Bansawathi School?

2. What are Thai elementary students at Bansawathi School's perceptions on word cards strategy?

## Research Methodology

### 1. Population

The population of this research is Thai grade 5 elementary students at Bansawathi School of academic year 2019 since the aim of this research is to investigate the effect of word cards strategy of Thai grade 5 elementary students.

## 2. Samples

The samples of this research are 30 Thai grade 5 elementary students at Bansawathi School of academic year 2019 selected by using purposive sampling since this sampling method lets the researchers select samples for specific reasons (Black, 2010). As this research would investigate the effect of word card strategy on Thai grade 5 elementary students, 30 Thai grade 5 elementary students at Bansawathi School of academic year 2019 are selected. This is because they have to study English course that vocabulary knowledge is required in order to successfully learn other English skills. Moreover, in academic year 2019, Bansawathi School has small number of students that there is only one grade 5 elementary classroom in the school so that all of 30 Thai grade 5 elementary students of academic year 2019 at Bansawathi School are selected.

### 3.Research Instruments

### 3.1 The Vocabulary Pretest and Posttest

The type of vocabulary pretest and posttest to be used is multiple choice test. It is one kind of vocabulary written tests in which students choose the right answer out of a choice of four options (Ur, 2012). In terms of the vocabulary pretest and posttest construction, all dimension of vocabulary knowledge (form, meaning, use) will be tested. The selected vocabulary to be used with word cards in this study consists of the total of 25 words from 5 themes (5 words from each theme). Each of 25 selected words will be tested in terms of its form, meaning, and use so that each word will be constructed into 3 questions. Therefore, all 25 selected words will be constructed with the total of 75 questions in which each word is tested as to its form, meaning, and use. To test the knowledge of form, Thai meaning of the word is used to be the question that students have to choose the correct English form of the word. To test the knowledge of meaning, English word is used to be the question that students have to choose the correct Thai meaning of the word. To test the knowledge of use, the question is the English sentence with the gap that students have to choose the correct English word that makes the sentence complete. However, in order to compare the scores of the pretest and the posttest to see whether the vocabulary knowledge of the samples is improved, all the questions for the pretest and posttest will be the same, but the order of the questions will be shuffled.

### 3.2 The Questionnaire

The research instrument to be used is the Likert-scale questionnaire. This Likert-scale questionnaire is a kind of rating scales that has been developed by Likert (1932) in order to measure the perception of a person. The Likert-scale is a five point scale which is used to allow a person to express how much they agree or disagree with a particular statement. To construct the Likert-Scale questionnaire about students' perception on word cards strategy, there are steps as follow:

1) The 5 Likert-Scale is selected in order to measure how much the samples agree or disagree with whether word cards strategy helps them learn vocabulary. The 5 scales range from (1) strongly disagree, (2) disagree, (3) undecided, (4) agree, to (5) strongly agree.

2) The areas of questionnaire questions are selected. For this study, the questions cover 3 areas: satisfaction, usefulness, and use.

3) The questionnaire questions of this study are adapted from Nah, White and Sussex (2008), Chen and Chun (2008), Ranalli (2009), Altiner (2011), and Mukandan, Baki and Ayub (2012) to cover all 3 areas: satisfaction, usefulness, and use towards word cards strategy.

4) The questionnaire of this study is consisted of 15 questions in total. The questions number 1, 2, 3, 4, and 5 are about students' satisfaction towards word cards strategy. The questions number 6, 7, 8, 9, and 10 are about students' perceptions towards the usefulness of word cards strategy. Lastly, the questions number 11, 12, 13, 14, and 15 are about students' perceptions towards the use of word cards strategy. However, the questionnaire is administered in Thai so that it can assist students to understand all the questions.

### 4.Teaching Materials

### 4.1 Lesson Plan

The lesson plan of this study is constructed based on the Communicative Language Teaching (CLT). It is a set of principles about teaching that focuses on meaningful communication. In this approach, students are given tasks to accomplish using language instead of studying the language (Richards, 2015). For CLT, the 3Ps approach is used as the principles for teaching consisting of Presentation, Practice, and Production. The first stage of teaching is Presentation. It is the beginning or introduction

to learning language. In this stage, teacher will explain and demonstrate the new language to the students. The second stage of teaching is Practice. It is the process that facilitates progress from the first stage to the last one. In this stage, students will practice the new language in a controlled and semi-controlled way using various types of activities. The last stage of teaching is Production. It is the culmination of the learning process where a student becomes a user of the language. In this stage, students transfer what they have learned to use in the simulation or real situations in an uncontrolled way.

### 4.2 Word Cards

The teaching material in this study is word cards. It is the small cards that each card contains English word to be learned on one side and Thai meaning on the other side. This is because writing the word on one side and its meaning on the other side allows the leaners to retrieve the meaning of the word from memory (Braddeley, 1990). Moreover, by using L1 meaning; the meaning can be easily understood that it has many rich associations for the learners (Laufer and Shmeli, 1997). In this research, each student makes their own set of cards so that they are able to be carried around easily.

The words in this research are selected from the Common European Framework of Reference for Language (CEFR)'s English vocabulary list. As to the English Language Institute (ELI) under the Office of the Basic Education Commission (OBEC) of Thailand, CEFR is used as the framework in order to set the goals for English teaching and learning. For CEFR, language proficiency is organized in 6 levels (A1, A2, B1, B2, C1, C2). The Ministry of Education of Thailand used CEFR as the framework, and stated that by the end of grade 6 elementary, students should have reached A1 level. In order to select the appropriate English vocabulary for grade 5 elementary students from CEFR's English vocabulary list, therefore, the A1 English vocabulary list is used. This vocabulary list is further categorized into various themes, but 5 themes are selected: (1) Animals, (2) Body, (3) Clothes, (4) Communication, (5) Education

The vocabularies in each theme were checked by having 3 English teachers to select words that they think that the students do not know, and the samples to select words that they do not know. The most 5 overlapped selected words between the teachers and the samples of each theme are chosen to be used. So, the total number is 25 words.

**5.Teaching Procedures**

**5.1 Applying Word Cards Strategy in Classroom**

The principles of applying word card strategy in this study are adapted from Nation (2001) as follow:

Step 1: Choosing words to learn

The 25 words are selected from the CEFR's A1 English vocabulary list covering 5 themes: (1) Animals, (2) Body, (3) Clothes, (4) Communication, (5) Education

Step 2: Making word cards

The small cards (5 x 4 centimeters) were used so that they are able to be carried around easily. Then, students make their own cards by writing down English word to be learned on one side and Thai meaning on the other side.

Step 3: Train the students how to use word cards

The principles of training students how to use word cards are as follows:

1. Choosing word and getting students to make their own word cards

2. Going through the cards to explain to learners how to use the cards

    2.1 Use recall

    2.2 Learn receptively

    2.3 Learn productively

    2.4 Keep changing the order of the cards and put difficult words near the beginning

    2.5 Say the words aloud or to yourself

3. Checking the words repeatedly to provide frequent encounters.

4. Motivating students to use the strategy often

Step 4: Using the cards

The principles of using the cards are as follows:

*4. 1Use recall*

Since the English word and its Thai meaning are written on different sides of the card, it allows the students to be able to retrieve its form or its meaning from memory.

*4.2 Learn receptively, then productively*

For receptive learning, students see the word and recall its meaning. For productive learning, students see the meaning and recall the word form.

*4.3 Keep changing the order of the cards in pack*

The order of the cards must be changed to avoid serial learning.

*4.4 Put the difficult words near the beginning*

Putting difficult words near the beginning to ensure that they get more attention.

*4.5 Say the words aloud or to yourself*

Saying the word aloud for productive purpose and faster learning with better retention

## Data Collection

### 1. The Vocabulary Pretest and Posttest

The multiple choice vocabulary Pretest and Posttest were used. The words to be tested are all 25 selected words covering 5 themes stated. The test was administered in Thai so that it can help the samples understand all questions. Each test took an hours to complete.

For pretest, before word cards strategy was applied; all the samples had been given the multiple choice vocabulary test along with 25 words to complete.

For posttest, all the samples were given the multiple choice vocabulary test along with 25 words to complete after word cards strategy had been completely applied.

### 2. The Questionnaire

After word cards strategy had been completely applied, the samples were given the questionnaire about the perception on word cards strategy to complete. This questionnaire was administered in Thai so that it can help the samples understand all the questions. The samples were given 30 minutes to complete the questionnaire.

## Data Analysis

### 1. The Vocabulary Pretest and Posttest

The data from the Vocabulary Pretest and Posttest were analyzed with Mean $(\bar{x})$ and Standard Deviation (S.D.) scores. Then, Pretest score and Posttest score were compared to see whether the samples' vocabulary knowledge was improved after using word cards strategy by using t-Test score.

### 2. The Questionnaire

The data from the questionnaire was analyzed with Mean ($\bar{x}$) and Standard Deviation (S.D.) scores of the perception on word cards strategy of the samples after word cards strategy had been completely applied.

## Results

### 1. The Students' Improvements in Vocabulary Knowledge

The data from the pretest and posttest were analyzed with mean ($\bar{x}$) and standard deviation (S.D.) scores. Then, the scores were compared to see whether the students' vocabulary knowledge was improved after using word cards strategy by using t-Test. The results of pretest and posttest are shown in Table 1.

Table 1: Mean and Standard Deviation Scores of the Vocabulary Pretest and Posttest

| Sample | The Vocabulary Pretest Scores (75 points) | The Vocabulary Posttest Scores (75 points) |
|--------|-------------------------------------------|--------------------------------------------|
| 1 | 25 | 34 |
| 2 | 22 | 37 |
| 3 | 46 | 69 |
| 4 | 43 | 47 |
| 5 | 20 | 32 |
| 6 | 26 | 35 |
| 7 | 25 | 46 |
| 8 | 19 | 33 |
| 9 | 56 | 66 |
| 10 | 24 | 37 |
| 11 | 54 | 71 |
| 12 | 41 | 55 |
| 13 | 26 | 58 |
| 14 | 33 | 51 |
| 15 | 23 | 41 |
| 16 | 31 | 46 |
| 17 | 29 | 55 |
| 18 | 23 | 55 |
| 19 | 33 | 49 |
| 20 | 34 | 51 |
| 21 | 25 | 38 |

| 22 | 22 | 39 |
|----|----|----|
| 23 | 55 | 69 |
| 24 | 68 | 75 |
| 25 | 63 | 74 |
| 26 | 58 | 60 |
| 27 | 63 | 74 |
| 28 | 66 | 75 |
| 29 | 58 | 72 |
| 30 | 64 | 73 |
| Mean | 39.16 | 53.90 |
| S.D. | 16.78 | 14.90 |

Table 1 illustrates the mean and standard deviation scores of the vocabulary pretest and posttest. According to the table, the mean score of the posttest is higher than that of the pretest. In details, the mean score of the vocabulary pretest is 39.16 (S.D. = 16.78) and the one from the posttest is 53.90 (S.D. = 14.90). This implies that the students' knowledge of vocabulary would increase due to the use of word cards strategy. To see the significant difference between the mean scores of both tests in order to see the effect of word cards strategy, t-Test was utilized. The results from the comparison of the mean scores is shown in Table 2 as follows.

Table 2: The Comparison of Mean Scores Analyzed by a Paired Sample t-Test

| Test | n | Mean ($\bar{x}$) | S.D. | t | Sig. |
|------|----|------|------|------|------|
| Pretest | 30 | 39.16 | 16.78 | 3.6004 | 0.000 |
| Posttest | 30 | 53.90 | 14.90 | | |

$p<.05$

Table 2 illustrates the result from the comparison of the mean scores with t-Test. According to the table, there was a significant difference between the vocabulary pretest and posttest scores ($p<.05$). This implies that there is a vocabulary knowledge improvement from the use of word cards strategy.

## 2. The Students' Perceptions on Word Cards Strategy

The Likert-scale questionnaire was used. The data from the questionnaire was analyzed with mean ($\bar{x}$) and standard deviation (S.D.) scores, and the mean scores then was interpreted as to the following ranges stated by Ketkham (2004).

4.21-5.00 = Students strongly agreed with statement (SA)

3.41-4.20 = Students agreed with statement (A).

2.61-3.40 = Students were uncertain with statement (UN).

1.81-2.60 = Students disagreed with statement (DA).

1.00-1.80 = Students strongly disagreed with statement (SD).

The result of the questionnaire was analyzed separately to cover the areas of satisfaction, usefulness, and use and shown in table 4.9, 4.10, and 4.11 respectively as follow.

### 2.1 The Students' Satisfaction on Word Cards Strategy

The data from the questionnaire about the satisfactions on word cards strategy was analyzed with mean $(\bar{x})$ and standard deviation (S.D.) scores, and interpreted as shown in Table 3 below.

Table 3 Mean Scores, Standard Deviation Scores, and Interpretation of the Perceptions on the Satisfactions on Word Cards Strategy

| No. | Items | Score | | |
|---|---|---|---|---|
| | | Mean $(\bar{x})$ | S.D. | Interpretation |
| | SATISFACTION | | | |
| 1 | I enjoyed learning vocabulary using word cards strategy. | 4.63 | 9.85 | Strongly Agree |
| 2 | I found that it is interesting to use word cards strategy. | 4.30 | 5.20 | Strongly Agree |
| 3 | I like seeing the English word and recall the meaning. | 4.50 | 7.55 | Strongly Agree |
| 4 | I like seeing the meaning of the word and recall the English word. | 3.77 | 4.80 | Agree |
| 5 | I would use word cards strategy again in the future. | 4.13 | 2.65 | Agree |
| | **Average** | **4.26** | **6.01** | **Strongly Agree** |

Table 3 illustrates the mean scores, standard deviation scores, and interpretation of the perceptions on the satisfactions on word cards strategy of the students. As to the table, students strongly agree with the satisfaction of word cards strategy ($\bar{x}$ = 4.26, S.D. = 6.01). This indicates that the students were highly satisfied with word cards strategy. In details, the students strongly agree with item (1) enjoying learning vocabulary using word cards strategy ($\bar{x}$ = 4.63, S.D. = 9.85) the most, followed by item (3) the use of word cards strategy is interesting ($\bar{x}$ = 4.30, S.D. = 5.20), and item (3) liking seeing the English word

and recall the meaning of words ($\bar{x}$ = 4.50, S.D. = 7.55) respectively. Besides, the students agree with item (5) liking seeing the meaning of words and recall the English words ($\bar{x}$ = 3.77, S.D. = 4.80), followed by item (4) willing to use word cards strategy again in the future ($\bar{x}$ = 4.13, S.D. = 2.65) respectively.

### 2.2 The Students' Perceptions on the Usefulness of Word Cards Strategy

The data from the questionnaire about the usefulness of word cards strategy was analyzed with mean ($\bar{x}$) and standard deviation (S.D.) scores, and interpreted as shown in Table 4 below.

Table 4 Mean Scores, Standard Deviation Scores, and Interpretation of the Perceptions on the Usefulness of Word Cards Strategy

| No. | Items | Score | | |
|---|---|---|---|---|
| | | Mean ($\bar{x}$) | S.D. | Interpretation |
| USEFULNESS | | | | |
| 6 | I could memorize English word easily using word cards. | 3.83 | 5.00 | Agree |
| 7 | I could memorize the meaning of the word easily using word cards. | 3.80 | 4.12 | Agree |
| 8 | I could learn many new vocabulary through word cards strategy. | 4.30 | 6.45 | Strongly Agree |
| 9 | I think word cards strategy could help me to learn vocabulary. | 4.43 | 6.56 | Strongly Agree |
| 10 | I think my vocabulary knowledge is improved after using word cards strategy. | 4.20 | 3.46 | Strongly Agree |
| Average | | 4.11 | 5.11 | Agree |

Table 4 illustrates the mean scores, standard deviation scores, and interpretation of the perceptions on the usefulness on word cards strategy. As to the table, students agree with the usefulness of word cards strategy ($\bar{x}$ = 4.11, S.D. = 5.11). This indicates that students perceived that word cards strategy is useful. In details, students strongly agree with item (9) the most, followed by item (8), and item (10) respectively. Besides, student agree with item (6), and item (7) respectively. That is, the students strongly agree with item (9) word cards strategy could help learning vocabulary ($\bar{x}$ = 4.43, S.D. = 6.56), followed by item (8) being able to learn many new vocabulary through word cards

strategy ($\bar{x}$ = 4.30, S.D. = 6.45), and item (10) vocabulary knowledge is improved after using word cards strategy ($\bar{x}$ = 4.20, S.D. = 3.46) respectively. Besides, the students agree with item (6) being able to easily memorize English word by using word cards ($\bar{x}$ = 3.83, S.D. = 5.00), and item (6) being able to easily memorize the meaning of the word by using word cards ($\bar{x}$ = 3.80, S.D. = 4.12) respectively.

### 2.3 The Students' Perceptions on the Use of Word Cards Strategy

The data from the questionnaire about the use of word cards strategy was analyzed with mean ($\bar{x}$) and standard deviation (S.D.) scores, and interpreted as shown in Table 5 below.

Table 5 Mean Scores, Standard Deviation Scores, and Interpretation of the Perceptions on the Use of Word Cards Strategy

| No. | Items | Score | | |
|---|---|---|---|---|
| | | Mean ($\bar{x}$) | S.D. | Interpretation |
| USE | | | | |
| 11 | I think it is easy to use word cards. | 4.27 | 6.40 | Strongly Agree |
| 12 | I have never experienced any difficulty using word cards. | 3.93 | 4.80 | Agree |
| 13 | I was motivated to use word cards often. | 4.17 | 5.92 | Agree |
| 14 | I could keep up with the learning of vocabulary using word cards. | 4.27 | 6.56 | Strongly Agree |
| 15 | I think word cards strategy is helpful. | 4.77 | 13.90 | Strongly Agree |
| Average | | 4.28 | 7.51 | Strongly Agree |

Table 5 illustrates the mean scores, standard deviation scores, and interpretation of the perceptions on the use of word cards strategy. As to the table, students strongly agree with the use of word cards strategy ($\bar{x}$ = 4.28, S.D. = 7.51). This indicates that students perceived that they can use word cards strategy in order to learn vocabulary. In details, students strongly agree with item (15) the most that word cards strategy is helpful ($\bar{x}$ = 4.77, S.D. = 13.90), followed by item (11) that word cards is easy to use ($\bar{x}$ = 4.27, S.D. = 6.40), and item (14) that being able to keep up with the learning of vocabulary by using word cards ($\bar{x}$ = 4.27, S.D. = 6.56) respectively. Besides, the students agree with item (13) being motivated to use word cards often ($\bar{x}$ = 4.17, S.D. = 5.92),

followed by item (12) that having never experienced any difficulty using word cards ($\bar{x}$ = 3.93, S.D. = 4.80) respectively.

## Discussion

The results of the study indicated that word cards strategy enhanced vocabulary knowledge improvement of the students from the vocabulary pretest and posttest. This corresponds with related studies in which word cards strategy was used in order to improve students' vocabulary knowledge. That is, it is a strategy that makes learning vocabulary successful, and helps improve vocabulary knowledge (Diaz, 2016 & Humphrey, 2016). Since the students of this study are Thai elementary students, the results were supported by Watcharapichitchai (2012) in which word cards strategy was used with Thai elementary students, and the results showed that the students' vocabulary knowledge was improved after using word cards strategy. In addition, since the students of this study are EFL learners who lack vocabulary, the results were also supported by Perez and Alvira (2016) where word cards strategy was used, and the results showed that word cards strategy helps the learners who are EFL low proficiency level to develop their vocabulary knowledge. In terms of vocabulary knowledge measured by the vocabulary pretest and posttest in this study, the knowledge of form, meaning, and use of both receptive and productive of vocabulary knowledge were all measured. As the results, the students' vocabulary knowledge about the recognition of form, meaning, and the use are improved by using word cards strategy, it corresponds with Nation (2001) that word cards strategy helps learners to familiarize themselves with the general aspects of vocabulary which are form, meaning, and use, and that word cards strategy helps improve vocabulary knowledge covering the knowledge of form, meaning, and use (Kuo and Ho, 2012). As word cards strategy for this study was used both receptively and productively, it corresponds with Nation (2001) that word cards can be used for both receptive and productive learning. In addition, the results were also supported by Kuo and Ho (2012) that due to the use of word cards, it helps the learning of receptive and productive vocabulary of the students. Therefore, vocabulary knowledge in terms of form, meaning, and use of both productive and receptive knowledge can be improved by using word cards strategy. Moreover, the results also indicated that the students had positive perceptions on word cards strategy. In details,

the students' perceptions on word cards strategy covered 3 areas of satisfaction, usefulness, and use. The satisfaction on word cards strategy, the results indicated that the students highly satisfied with word cards strategy. That is, the students enjoyed learning vocabulary using word cards strategy, and they thought that the use of word cards strategy is interesting. This corresponds with Altiner (2011) that word cards strategy affected the learners' enjoyment of learning vocabulary. Interestingly, even though the results suggested that the students like both seeing the English words and recall the meaning, and seeing the meaning of words and recall the English words, the mean scores indicated that the students preferred seeing the English words and recall the meaning to seeing the meaning of words and recall the English words which corresponds with Nation (2001) that receptive learning is usually easier than productive learning. Lastly, the students also agreed that they would use word cards strategy again in the future that corresponds with Diaz (2016) who made use of word cards strategy and found that all learners were going to continue using word cards to learn vocabulary. The usefulness on word cards strategy, the results indicated that the students perceived that word cards strategy is useful. In details, the students strongly agreed that word cards strategy could help to learn vocabulary, and they could learn many new vocabulary through word cards strategy. This corresponds with Nation (2001) that learners could successfully learn large numbers of words in a very short time using word cards. The students also thought that their vocabulary knowledge is improved after using word cards strategy which corresponds with one of the advantages of word cards strategy that it helps leaners guild up the feeling of achievement (Kuo and Ho, 2012). Besides, the students agreed that they could easily memorize English word and the meaning of the word by using word cards which correspond with one of the advantages of word cards strategy that it helps learners to learn the written form and the meaning of the word, and also helps learners to make the connection between form and meaning (Nation, 2001 & Ying He, 2010). The use on word cards strategy, the results indicated that the students highly perceived they can use word cards strategy. In details, the students thought that word cards strategy is helpful, and easy to use. This finding corresponds with Altiner (2001) that the learners thought word cards strategy is easy to use, and it is a helpful strategy to learn vocabulary (Diaz, 2016). Because word cards strategy is helpful and easy to use, it supports the results from the questionnaire that the students have never experienced any difficulty

using word cards. In addition, the students also thought that they could keep up with the learning of vocabulary by using word cards, and they were motivated to use word cards often. These affected by how word cards strategy was used in the classroom that there were many activities that motivated the students to use word cards that these activities were adapted from Nation (2001). Moreover, because word cards strategy gave the students many chances to meet the words, it supports the result that the students agreed that they could keep up with learning vocabulary. To conclude, the perceptions of the students on word cards strategy were all positive. That is, the students highly satisfied with word cards strategy. They perceived that word cards strategy is useful, and they highly perceived that they can use word cards strategy. The results of the students' perceptions correspond with the results of the students' improvement in vocabulary knowledge due to the use of word cards strategy. This indicated that since word cards strategy enhanced the students' improvement in vocabulary knowledge, it affected the satisfaction, perception of usefulness, and perception of use of the students on word cards strategy that overall the students had positive perceptions on word cards strategy.

## Conclusion

This experimental research study on the use of word cards strategy with Thai elementary students revealed that the use of word cards strategy helped improve the students' vocabulary knowledge in terms of the recognition of form, the recognition of meaning, and the use of vocabulary. Moreover, it also revealed that the students had positive perceptions on word cards strategy. Regarding the satisfaction, it revealed that the students highly satisfied with word cards strategy that they enjoyed learning vocabulary using word cards strategy, and thought that the use of word cards strategy is interesting. In addition, the students liked both seeing the English words and recall the meaning and seeing the meaning and recall the English words. Lastly, the students would use word cards strategy again in the future. For the usefulness, it revealed that the student perceived that word cards strategy is useful that word cards strategy could help them to learn vocabulary, and they could learn many new vocabulary through word cards strategy. The students also thought that their vocabulary knowledge is improved after using word cards strategy. Besides, by using word cards strategy, the students could easily memorize English word and the meaning of the word. For the use,

it revealed that the students highly perceived that they can use word cards strategy. That is, the students thought that word cards strategy is helpful, and easy to use that most of them have never experienced any difficulty using word cards. In addition, the students could keep up with the learning of vocabulary by using word cards, and they were motivated to use word cards often.

## Recommendations

1. Further studies could still use word cards strategy in order to help vocabulary teaching and to improve vocabulary knowledge of the students.

2. Further studies could use word cards strategy with elementary students.

3. Further studies should adapt more activities to use word cards.

4. Further studies should have the interview session in order to get in-depth information about the perceptions on word cards strategy.

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