#### <u>วารสารวิชาการ</u> คณะมนุษยศาสตร์และสังคมศาสตร์

The Use of Reading-Based Vocabulary Exercises to Improve Vocabulary Learning for Third - Year Business Vocational Students at Faculty of Industrial Technology, Nakhon Phanom University การใช้แบบฝึกหัดยึfหลักการอ่านเพื่อพัฒนาการเรียนรู้คำศัพท์ สำหรับนักศึกษาระดับประกาศนียบัตรวิชาชีพ ขั้นปีที่ 3 สาขาวิชาบริหารธุรกิจ คณะเทคโนโลยีอุตสาหกรรม มหาวิทยาลัยนครพนม

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาการใช้แบบฝึกหัด ศัพท์ยึดหลักการอ่านเพื่อพัฒนาการเรียนรู้คำศัพท์สำหรับ นักศึกษาระดับประกาศนียบัตรวิชาชีพชั้นปีที่ 3 สาขาวิชา บริหารธุรกิจ คณะเทคโนโลยีอุตสาหกรรม มหาวิทยาลัยนครพนม กลุ่มตัวอย่างคือ นักศึกษาระดับประกาศนียบัตรวิชาชีพชั้นปีที่ 3 สาขาวิชาบริหารธุรกิจ คณะเทคโนโลยีอุตสาหกรรม มหาวิทยาลัย นครพนม จำนวน 30 คน เครื่องมือที่ใช้ในการวิจัยคือ 1) แบบทดสอบ คำศัพท์ยึดหลักการอ่านก่อนและหลังการเรียน 2) แบบฝึกหัด ศัพท์ยึดหลักการอ่าน และ 3) แบบสอบถาม การดำเนินการวิจัย กลุ่มตัวอย่างทำแบบทดสอบคำศัพท์ยึดหลักการอ่านก่อนเรียน แล้วจึงเรียนคำศัพท์จากแบบฝึกหัดศัพท์ยึดหลักการอ่านจำนวน 8 ชุด จากนั้นจึงทำแบบทดสอบคำศัพท์ยึดหลักการอ่านหลังเรียน และตอบแบบสอบถาม การวิเคราะห์ข้อมูลเพื่อหาค่าทางสถิติ ได้แก่ ร้อยละ (%) ค่าเฉลี่ยส่วนเบี่ยงเบนมาตรฐาน (S.D.) และ ค่าที (t - test)โดยข้อเสนอแนะและความคิดเห็นสรุปและวิเคราะห์ เป็นหัวข้อ ผลการวิจัยพบว่าคะแนนที่ได้จากแบบทดสอบคำศัพท์ ยึดหลักการอ่านหลังเรียนสูงกว่าคะแนนก่อนเรียนซึ่งแตกต่าง อย่างมีนัยสำคัญทางสถิติที่ระดับ .000 ค่าทีคือ -15.662 ้นอกจากนี้ผลจากแบบสอบถามแสดงให้เห็นว่ากลุ่มตัวอย่าง เห็นด้วยว่าการใช้แบบฝึกหัดศัพท์ยึดหลักการอ่านสามารถช่วย ในการเรียนรู้คำศัพท์มากยิ่งขึ้นในด้านการจดจำคำศัพท์ การเข้าใจ ความหมายของคำศัพท์ และการใช้คำศัพท์ในบริบท

คำสำคัญ :

แบบฝึกหัดศัพท์ยึดหลักการอ่าน, การเรียนรู้คำศัพท์, การจดจำคำศัพท์, การใช้คำศัพท์ในบริบท <mark>วารสารวิชาการ</mark> คณะมนุษยศาสตร์และสังคมศาสตร์

#### Abstract

The purpose of this study was to examine the use of reading-based vocabulary exercises for third - year business vocational students at Faculty of Industrial Technology, Nakhon Phanom University. The participants were 30 thirdyear business vocational students. The research instruments comprised 1) the pre and post vocabulary test, 2) the readingbased vocabulary exercises, and 3) a guestionnaire. In the process of data collection, the participants were asked to do the pre vocabulary test to measure their vocabulary learning, and then eight sections of the reading - based vocabulary exercises were presented to the participants to learn the target words. After the participants completed the final section of the reading-based vocabulary exercises, they were asked to do the post vocabulary test and then complete the questionnaire. The data obtained were analyzed and interpreted statistically by percentage, mean  $(\overline{x})$ , standard deviation (S.D.), and t - test. Comments and suggestions from the questionnaire were interpreted by content analysis. The results showed that the scores of pre and post vocabulary tests were significantly different at ,000 and t-test score was -15,662. The mean score was higher in the post - test. Furthermore, the results of the questionnaire also showed that the participants found the use of reading-based vocabulary useful for improving their vocabulary learning in terms of recognizing the target

words, understanding the meanings of words, and using the target words in the context more productively.

Keywords :

Reading - based vocabulary exercises, vocabulary learning, recognizing the target words, using the target words in the contexts

## Introduction

Vocabulary is important for mastering foreign language learning (Nation, 1990; Rubin & Thomson, 1994; Nation, 2001; Folse, 2008). Schmitt (2000) stated that one might not be able to understand, read, write, or speak a foreign language without knowing sufficient words. Nation (2001), Laufer (2003), Pikulski and Templeton (2004) believed that vocabulary plays an important role in developing reading skills. This idea is well supported by Stoller and Grabe (1993), Aebersold and Field (1997), Bravo, Hiebert, and Pearson (2007) who also believed that when learners have obtained an adequate number of words, they are more likely to read and understand the texts easily and thoroughly.

Kufaishi (1988) found that the limitation of vocabulary knowledge is regarded as one of main problems for students who learn English as a foreign language (EFL) to improve their language competence. This is harmonious with Gunning (2002), who discovered that the main problem that most EFL students have when reading English texts is lack of vocabulary. For some readers, insufficient vocabulary knowledge can pose the main obstacle for English language learners and cause them to stop reading (Esky, 1975).

Research conducted by Songsiri (1999), Wongsothorn, Hiranburana and Chinnawongs (2003), Wangkangwan (2007), Aegpongpaow (2008) reported that lack of vocabulary is one

of the major difficulties in reading for Thai students. Moreover, Choosri and Intharaksa (2011), Saraithong and Chancharoenchai (2012) also found that the English competence of Thai vocational students is rather poor. Likewise, Saraithong and Chancharoenchai (2012) also claimed that inadequate vocabulary knowledge impeded Thai vocational students to improve their English competence. Similarly, a preliminary investigation conducted in the present study to survey problems in teaching and learning English of third-year business vocational students Faculty of Industrial Technology, Nakhon Phanom University. The result showed that lack of vocabulary knowledge is the main problem for learning English.

In a recent ESL/EFL classroom, reading - based vocabulary exercises have been adopted to enhance vocabulary learning (Min, 2008). Reading-based vocabulary exercise is an effective tool to improve vocabulary learning (Paribakht & Wesche, 1996; Zimmerman, 1997; Min & Hsu, 2008; Amiryousefin & Kassaian, 2010). Numerous studies showed that reading-based vocabulary exercises are a productive way to learn vocabulary (Paribakht & Wesche, 1996; Zimmerman, 1997; Kim, 2008; Min & Hsu, 2008; Amiryousefin & Kassaian, 2010; Wesche & Paribakht, 2000; Hashemzadeh, 2012). Wesche and Paribakht (2000) also asserted that reading - based vocabulary exercises lead to a better vocabulary learning, and greater depth of vocabulary knowledge. Vocabulary exercises provide multiple exposures to different lexical features and consequently improve learners' vocabulary knowledge. Therefore, one way to help business vocational students at Faculty of Industrial Technology, Nakhon Phanom University to improve their vocabulary learning is through the reading-based vocabulary exercises.

# Purpose of the study

To examine the use of reading - based vocabulary exercises in improving vocabulary learning of third - year business vocational students at Faculty of Industrial Technology, Nakhon Phanom University.

## Research questions

 Can reading-based vocabulary exercises help third-year business vocational students at Faculty of Industrial Technology, Nakhon Phanom University to improve their vocabulary learning?

2. If so, to what extents do reading - based vocabulary exercises help third-year business vocational students to improve their vocabulary learning in terms of recognizing the target words, understanding the meaning of words, and using the target words in the context?

## **Participants**

The participants were 30 third - year business vocational certificate students enrolled in Business English course (10000204) in the first semester of academic year 2013 at Faculty of Industrial Technology, Nakhon Phanom University.

## Research instruments

Research instruments were the reading - based vocabulary exercises, pre and post vocabulary tests, and a questionnaire.

## The reading-based vocabulary exercises

The criterion to select the target words to be included in the reading-based vocabulary exercises was based on high-frequency words (Carter & McCarthy, 1988; Nation & Coady, 1988; Hunston and Francis & Manning, 1997). In order to obtain a target word list, 74 business news passages which contained a total occurrence of 34,374 words were collected and keyed into the software called "WordSmith Tools Version 4" to determine the most frequently found words. The result showed a corpus of 1,072 most frequently occurring words. From a list of high frequency occurring words, 275 words checked by the teachers, and 480 words checked by students. A comparison of the two lists yielded 80 overlapped words to be mastered.

There were eight sections of the reading - based vocabulary exercises, each section comprising 10 target words presented

in the following five exercises:

### Exercise 1: Underlining target words

This exercise is 'Selective Attention' stage according to Paribakht and Wesche (1996)'s typology of the text - based vocabulary exercise. It aims to draw the learner's attention to the target words and to ensure that students notice or apperceive the target words.

#### Exercise 2: Matching words with definition

This exercise is 'Recognition' stage. This type of exercise requires students to recognize the target words and their meanings. The procedure involves having students read the passage again and find the underlined words corresponding to the definition. And then, match the target words in column A with the appropriate definition in column B.

#### Exercise 3: Changing grammatical category of target words

This exercise is 'Manipulation' stage according to Paribakht and Wesche (1996)'s typology of the text - based vocabulary exercise. It aims to draw students' knowledge of morphology and grammatical categories.

### Exercise 4: Multiple choices: cloze exercises

This exercise is 'Interpretation' stage. This type of exercise requires students to involve more precise semantic analysis including the relationship of target words with other words in given contexts (e.g., collocation, synonym, and antonyms).

## Exercise 5 : Unscrambling string of words

This exercise type is 'Production' stage. The purpose is to focus learners' attention to the characteristics of the target words required in the production of new sentences. In this exercise, students are given strings of words including target words to be rearranged into correct sentence.

## Pre and post vocabulary tests

The pre and post vocabulary tests were prepared to answer Research Question 1. They were constructed by randomly selecting 20 words from the target word list. The pre and post vocabulary tests comprised five exercise types with the same form as the reading-based vocabulary exercises including (1) underlining target words, (2) matching words with definition, (3) changing grammatical category of target words, (4) multiple choices; cloze exercises, and (5) unscrambling string of words. Twenty words were included in five types of vocabulary exercises. There were 100 items in the vocabulary exercise with 20 target words in each type. The total score was 100 points.

## Questionnaire

A questionnaire was prepared to answer Research Question 2, which concerned students' opinions toward the use of reading based vocabulary exercises to improve their vocabulary learning. The questionnaire was divided into two parts. The first part was a checklist type using Likert method with five rating scales (Sclove, 2001). The second part was open - ended question for the participants to express their opinions regarding the use of the reading-based vocabulary exercises for improving their vocabulary learning.

## Data collection

Data collection procedure was divided into ten sessions for 10 week study. Firstly, the participants were asked to do the pre vocabulary test to measure their vocabulary knowledge. Secondly, the participants were engaged in eight sections of the reading - based vocabulary exercises respectively in order to learn the 80 target words. Then, the participants took the post vocabulary test to measure their progress they made in vocabulary learning after eight sections of the reading - based vocabulary exercises. The questionnaire was also given to the participants to investigate their opinions toward the use of reading - based vocabulary exercises for improving their vocabulary learning. Finally, the data from of the pre and post vocabulary tests and the questionnaire were compared and analyzed.

## Results of the study

Result of Research Question 1: Can reading - based vocabulary exercises help third - year business vocational students at Faculty of Industrial Technology, Nakhon Phanom University, to improve their vocabulary learning?

To answer the first research question, the participants took the pre and post vocabulary test before and after they completed eight sections of the reading - based vocabulary exercises. The results of the pre and post vocabulary tests were presented in Table 1 below.

Table 1: The Statistical Difference of Pre and Post Vocabulary Tests

Test	x	S.D.	t - test	Р
Pre-test	38.03	6.49	-15.662	***0.000
Post-test	61.30	10.73		

Table 1 showed that the mean score  $(\bar{x})$  of the pre - test was 38.03 with the standard deviation (S.D.) of 6.49. After completion of eight sections of the reading - based vocabulary exercises, the mean score  $(\bar{x})$  of 61.30 was higher in the post test with the standard deviation (S.D.) of 10.73. Moreover, a significant difference between pre - test and post - test score was at .000 and t - test score at -15.662 in the participants' performance after the use of the reading - based vocabulary exercises treatment. This showed that the reading - based vocabulary exercises could help the third - year business vocational students to improve their vocabulary learning.

Results of Research Question 2: If so, to what extents do reading - based vocabulary exercises help the third - year business vocational students improve their vocabulary learning in terms of recognizing the target words, understanding the meaning of words, and using the target words in the context?

The results from the questionnaire showed that the students perceived the reading-based vocabulary exercises as helpful for improving their vocabulary learning in terms of recognizing the target words, understanding the meaning of the words, and using the target words in the context, with a total mean score of 3.78 at "High" with standard deviation at 0.69.

Furthermore, the participants provided useful comments and suggestions on the use of the reading - based vocabulary exercises to improve their vocabulary learning, which were grouped into three topics as follows:

Recognizing the target words - Participants reported that the reading - based vocabulary exercises could help them recognize the target words better. As they encountered words many times through various vocabulary tasks, they became familiar with the target words and were able to recognize the words well. This is because each exercise required them to use target words in different contexts. Furthermore, they could recognize the target words well because the new 10 words were presented in each section. This suggests that the presentation of 10 words was an appropriate number for students to study and recognize per lesson.

Understanding the meaning of words - Participants also confirmed that the reading - based vocabulary exercises could help them understand the meaning of words better. They could understand the meaning of words when reading. They could understand the meaning of the target words well because they knew definition of words from matching target words with definition exercise and they had a chance to analyze the relationship of target words with other words from the given contexts in multiple - choices; cloze exercises.

Using the target words in the context - Participants also reported that the reading - based vocabulary exercises could enable them to use the target words in the context well. They were able to use the words in contexts correctly because the exercise tasks required them to employ the target words in various contexts. Likewise, for them, learning new words in contexts was an effective way to obtain more words. Since they would know how the target word fit in with the other words in a sentence so they were able to use the target words in contexts more easily.

### Discussion

The following discussion is based on the result of the study.

1. The results from the pre and post vocabulary tests showed that the reading - based vocabulary exercise is one way to improve students' vocabulary learning. The findings are well supported by Paribakht and Wesch (1996), Zimmerman (1997), Min (2008), Amiryousefi and Kassaian (2010), Hashemzaded (2012), who found that learning vocabulary by reading-based vocabulary exercises leads to considerable gains in learners' vocabulary learning.

2. The findings revealed that the new 10 target words included in each section of the reading - based vocabulary exercises are an appropriate number of words for students to remember. Similar studies by Nation (1982), Wallace (1982), Carter and McCarthy (1988), also suggested that the appropriate number of new words to present to learners was between 5 and 15 words in one lesson. This indicates that students should learn approximately new ten words per lesson.

3. The findings showed that multiple exposures to the target word from various exercises led to considerable gain of vocabulary learning. The appearance of a target words in five vocabulary exercise types could encourage students to make extra effort to identify its features because they know that they will have to deal with the word again. The findings are well supported by Wesche and Paribakht (2000), who stated that multiple exposures to words are normally required for students' acquisition. Various tasks provide multiple encounters with the target words and require attention to different lexical features, a combination that leads to elaboration as well as strengthening

of the knowledge learners have of particular lexical items (Wesche & Paribakht, 2000).

4. The participants reported that after learning target words through the reading-based vocabulary exercises, they could read texts more comprehensively. Similar findings were found by Laufer (1989), Hirsh and Nation (1992), Stoller and Grabe (1993), Aebersold and Field (1997), Hsueh - Chao and Nation (2000), who reported strong correlations between vocabulary and reading comprehension. When learners obtained an adequate number of words, they would be able to read and understand the text a lot more easily and thoroughly. Similarly, Bravo, Hiebert and Pearson (2007) saw that vocabulary is a significant factor in improving proficiency in reading. It can be concluded that vocabulary and reading has very close relationship due to the fact that improvements in vocabulary bring improvements in reading skill.

5. The participants reported that they could recognize the target words well from matching words with definition exercise. They found this exercise easy to do and useful in helping them recognize the meaning of words directly and quickly. This exercise type is at recognition stage in the typology of the text - based vocabulary exercise (Paribakht & Wesche, 1996). The task involves having students read the reading passage and find the underlined words corresponding with the definition.

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6. The participants reported that the five vocabulary exercise types, namely underlining the target words, matching the target words with definition, changing grammatical category of the target words, multiple - choices: cloze exercises, and unscrambling string of words in the reading - based vocabulary exercises could help them understand the meaning of words well. Especially in the multiple choices: cloze exercises, they could choose the correct word from given choices to fit in the blank correctly because they could guess the meaning of unknown words from the context. The finding was well supported by Nation (1990), Lewis (1997), Pikulski and Templeton (2004), Kargozari and Ghaemi (2011), who mentioned that it is a practical way to allow students to learn new words in contexts or surrounding sentences so that they could understand the meaning of words more effectively.

Implications for English language teaching and learning

Some implications for the teaching and learning of English can be drawn as follows:

1. The results of the present study indicate that business vocational students should learn about 10 target words per lesson because it is an appropriate number of words for learners to remember in each lesson. Thus, when preparing vocabulary lessons, teachers may present 10 target words for business

vocational students in each lesson. This is well supported by Nation (1982), Wallace (1982), Carter and McCarthy (1988), who stated that students should learn 5 - 15 words per time.

2. There are benefits in using the business news corpus for vocational teachers and course designers. When preparing a vocabulary lesson in reading class, teachers should concentrate on high frequency words to be included in a target word list. Students are more likely to encounter high frequency ones in some common texts.

3. Teachers and course designers can use the high frequency of words derived from the corpus in vocabulary materials design, including the development of vocabulary in reading.

## Recommendations for further study

On the basis of the research findings, the recommendations were as follows:

 There were only thirty students participated in this study. In order to be able to generalize the results of the study, a larger number of students should participate.

2. Further research should be conducted on vocational students from other majors of the study, such as hotel management, information technology, mechanics, electronics, construction, and etc.

3. Further research should investigate the effect of different vocabulary exercise types to see which vocabulary exercise type helps students to recognize the target words, understand the meaning of words, and use the target words in the context most.

4. In this study, the target words were obtained from the economic section from the Bangkok Post Newspaper only. Research on the learning of vocabulary in other sections of English newspapers such as telecommunications, tourism, aviation, retail, marketing, or financial advice should be conducted.

5. In this study, the selection of target words was made on the high frequency words, the students were asked to check the difficult words from the high frequency word list. For further studies, students should be asked to do a vocabulary translation test by giving the meaning of words in Thai to measure which words are known or unknown words in order to identify the difficult words.

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