

ผลของการเจอคำศัพท์ต่อการเรียนรู้คำศัพท์ของนักศึกษาไทย

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บทคัดย่อ

การเรียนรู้คำซ้ำจำเป็นในการเรียนคำศัพท์เนื่องจากนักเรียนไม่สามารถเรียนรู้คำศัพท์ได้จากการเจอคำศัพท์เพียงหนึ่งครั้ง (Nation, 2001) แต่อย่างไรก็ตาม จำนวนครั้งที่เพียงพอต่อการเจอคำศัพท์นั้นยังไม่แน่นอน ดังนั้นงานวิจัยเรื่องนี้จึงสำรวจผลของการเจอคำศัพท์ในจำนวนครั้งที่แตกต่างกันต่อการเรียนรู้คำศัพท์เชิงการรับรู้และคำศัพท์เชิงการใช้งาน โดยมีนักศึกษาชั้นปีที่ 2 จำนวน 37 คน เข้าร่วมในงานวิจัยชิ้นนี้ นักศึกษาจะได้เรียนคำศัพท์ที่กำหนดในแต่ละประโยคสั้นๆ หลายๆ ครั้ง จากนั้นจะทดสอบคำศัพท์เชิงการรับรู้และคำศัพท์เชิงการใช้งานหลังจากที่เจอคำศัพท์เหล่านั้นจากแต่ละจำนวนครั้งที่กำหนดไว้ ผลการทดลองพบว่า นักศึกษาได้รับความรู้ด้านคำศัพท์เพิ่มมากขึ้นเมื่อได้เจอคำศัพท์หลายๆ ครั้ง นอกจากนี้ยังพบว่านักศึกษาเรียนรู้คำศัพท์เชิงการใช้งานได้เร็วกว่าคำศัพท์เชิงการรับรู้

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An Effect of Word Repetitions on Thai Student's Vocabulary Learning

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Abstract

Word repetition is needed in vocabulary learning since learners could not learn a word within one repetition (Nation, 2006). However, it is still questionable on the sufficient numbers of repetitions in vocabulary learning. Therefore, the study aimed at investigating the effect of word repetitions at different encounters on receptive and productive vocabulary knowledge. There were 37 second-year students participated in the study. They repeatedly learned the target words in each short sentence, then they were tested both receptive and productive tests after completing each set of repetition. The result showed that the students gained more vocabulary knowledge when they repeatedly encountered the target words. Additionally, the students seemed to rapidly obtain more productive vocabulary than receptive vocabulary knowledge.

Keywords : word repetition, encounter, vocabulary

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1. Introduction

In the field of language learning, vocabulary is acknowledged as a component that promotes competency of all language skills: reading, writing, listening and speaking (Godwin-Jones, 2010; Mohebbi, 2013; Schmitt, 2008). There are many studies paying attention to vocabulary teaching and learning focusing on vocabulary development and improvement (Nation, 2006; Schmitt, 2008). It was claimed that vocabulary can be obtained if there is a sufficient amount of input and learners consciously process both morphological and semantic information (Zhu, 2015). The sufficient input can be both listening and reading. However, reading is considered a sufficient input since there is a relationship between vocabulary learning and reading comprehension (Brown, Waring, & Donkaewbua, 2008; Eckerth & Tavakoli, 2012; Pigada & Schmitt, 2006). Additionally, vocabulary can be gained by the frequency of word exposures or repetitions through reading (Beck, Perfetti, & McKeown, 1982; Brown, 1993).

2. Objective

2.1 To investigate the effect of word repetitions at different encounters on receptive and productive vocabulary knowledge.

3. Review of Literature

3.1 The effect of word repetitions on vocabulary learning

The number of word repetitions is required for reading in order to comprehend a text (Hu & Nation, 2006; Laufer, 1989; Nation, 2006; Schmitt, Jiang, & Grabe, 2011). It was found that around 95% of vocabulary helps in reading comprehension (Laufer, 1989). Additionally, Hu and Nation (2006) indicated the essential vocabulary for reading is around 98-99%. Nation (2006) also claimed that 98% of vocabulary knowledge is sufficient to understand. Similarly to Hu and Nation (2006) and Nation (2006), Schmitt et al., (2011) studied the

percentage of word knowledge in a text, and they found that 98% of vocabulary knowledge is necessary for reading. However, in order to reach that number of vocabulary knowledge, learners need to know at least 8,000-9,000 word families to read a text (Nation, 2006).

According to that percentage, some learners successfully reach that number, but some are not. Some of them seem to have difficulty in reading a text since their vocabulary knowledge does not cover 8,000-9,000 word families. According to Srisawat and Poonpon (2014), their participant's vocabulary knowledge was quite low and did not meet the need of the language use. Therefore, the result could imply that the participants might have difficulty in reading text since their vocabulary knowledge was below than 8,000-9,000 word families. Likewise, learners have an obstacle to learn L2 since they lacked of vocabulary knowledge and they did not know which words to focus. Although there were studies on the high frequently words that learners need to know, they cannot learn, memorize or use most of the words. Therefore, to develop or improve vocabulary knowledge, a prerequisite of word learning to focus as a priority of learning is word repetition or word encounter (Cho & Ma, 2015).

According to Zimmerman (2009), word repetition in context can lead to vocabulary learning. Word repetition is vital for vocabulary learning because learners cannot learn a word within one repetition (Nation, 2001). They have to meet the word several times to acquire or learn that word. Additionally, word repetition leads to the multiple aspects of vocabulary knowledge such as phonology, semantics, syntax, spelling, and morphology (Ellis, 1995; Ellis, 2002; Schmitt, 2008). Word repetition can help learners learn words with different aspects if they expose to that word more than once. Zhu (2015) mentioned that word repetition can increase word's noticing and processing and strengthens

word association between the target words and cognitive processing. Hence, word repetition provides opportunities for learners to learn vocabulary in different aspects.

It was suggested that learners learn vocabulary through input (Ellis, 2002; Schmitt, 2008). The sufficiently number of word repetition plays an important role in input. The input that provides the number of word repetitions is from reading (Pellicer-Sánchez & Schmitt, 2010; Schmitt, 2008; Zhu, 2015). Through reading, learners could learn word incidentally and incrementally as they interact with reading text or expose to the word several times (Cho & Ma, 2015; Rott, 1999; Zhu, 2015). Zahar, Cobb, and Spada (2001) stated that learners exposing to a variety of context will obtain vocabulary knowledge. However, to learn vocabulary through reading, the text must provide enough clues to help learners develop their understanding of word they encounter (Rott, 1999; Zahar et al., 2001). Although some context is opaque or unclear, they will learn and pay attention to that word when they meet it in a clearer context. Therefore, word repetitions through reading lead to vocabulary knowledge because learners encounter words many times and notice this word when they meet it again.

Although word repetition is considered the priority of vocabulary learning (Cho & Ma, 2015), it is still questionable how many repetitions are needed to learn an unknown word. Many studies revealed the different numbers of word repetitions on vocabulary learning (Brown et al., 2008; Chen & Truscott, 2010; Hulstijn, Hollander, & Greidanu, 1996; Rott, 1999; Pellicer-Sánchez & Schmitt, 2010; Waring & Takaki, 2003; Webb, 2007). Webb (2007) claimed that only one repetition to a word can help develop the text understanding. However, vocabulary can be more enhanced when it is repeatedly met several times. Hulstijn et al., (1996) stated that three times is enough for learning; Rott (1990) found six times; Chen and Truscott (2010) and McKeown, Beck,

Omanon, and Pople, (1985) found seven times; Saragi, Nation, and Meister (1978) and Webb (2007) found ten times. Moreover, Brown et al., (2008), Pellicer-Sánchez and Schmitt (2010), and Waring and Takaki (2003) insisted that learners should meet the vocabulary more than ten times. This is consistent with Nation (1990) who mentioned 5-16 repetitions to learn vocabulary.

Besides, Cho and Ma (2015) explored the effect of tasks and word repetition with 90 college students with low English proficiency in Korea. The students were divided into two groups for doing the tasks with one and four repetitions in reading text. The result revealed that the high frequency (four repetitions) was more effective than the low frequency. Moreover, the high frequency resulted in promoting active and passive vocabulary knowledge both short-term and long-term memories.

Moreover, Eckerth and Tavakoli (2012) investigated the effect of word repetitions on tasks with advanced learners who were non-native speakers in a university in the United Kingdom. The participants of this study encountered the target words one and five times. The result showed that five repetitions led to vocabulary gain. These two studies revealed that the more repetitions to the words the learners encounter, the higher vocabulary knowledge they obtain. Additionally, Laufer and Rozovski-roitblat (2015) compared three tasks with different word repetitions with the intermediate high school students. The tasks consisted of reading with 6-9, 12-15 and 18-21 repetitions, reading + focus on form with 2-3, 4-5 and 6-7 repetitions, and reading with one repetition in a text + focus on form with 2-3, 4-5 and 6-7 repetitions in an exercise. The result presented that reading with one repetition in a text + focus on form with 2-3 repetitions in the exercise was more effective than reading with 18-21 repetitions and reading + focus on form with 6-7 repetitions because learners could gain more

vocabulary knowledge in word-focused activities. It can refer that if the task is well designed, learners could learn the words even though they encounter the words a few times.

Joe (2010) conducted a longitudinal study with a learner in New Zealand over three months. The researcher did both qualitative and quantitative studies to provide the effect of vocabulary learning through word repetitions. In this study, the researcher did not mention the exact number of word repetitions. However, the participant developed their vocabulary knowledge after encountering words over 4-6 days. The researcher also concluded that learners learned vocabulary better if they encountered words many times. Additionally, Webb (2007) mainly focused on the vocabulary gained from word repetitions. He investigated the effect of word repetitions with advanced students in Japan. He provided reading sentences with the target words by dividing the students into four groups with different repetitions: one, three, seven, and ten repetitions. The result also showed that the students began to obtain vocabulary knowledge when they encountered the words three times. Moreover, their vocabulary knowledge was more developed in the encounter seven and ten respectively.

3.2 The present study

Different studies provided different results of vocabulary knowledge gained from word repetition. Some studies mentioned that learners obtained more vocabulary knowledge when they had several encounters with the target words; some stated that tasks affected the vocabulary learning and learners learned better although there was a few repetitions provided. However, although the related studies indicated the effect of word repetitions on productive and receptive vocabulary knowledge, they seemed to not mention the raise of the knowledge at different repetitions. Therefore, the present study aimed at investigating the effect

of word repetitions at different encounters on receptive and productive vocabulary knowledge.

4. Methodology

4.1 Participants

There were 37 second-year English major students studying at Rajabhat Maha Sarakham University. They were Thai who did not have any experience in L2 environment and their ages were ranged from 18-25 years old.

4.2 Target words

The target vocabulary was from the academic wordlist (Coxhead, 2000). The criteria for words' selection focused on the frequency of occurrence and the words which were considered as unknown words for the students. The students completed the vocabulary checklist to select their unknown words. In the checklist, the students were asked to mark 'I don't know the word' if they did not know that word; they marked 'I have seen this word but I don't know its meaning' if they were familiar with the word but could not remember the meaning; or if they knew the word, they were asked to write its meaning. After finishing the vocabulary checklist, the unknown words were arranged according to the frequency of occurrence. Therefore, the first ten words of this study consisted of two adjectives, three verbs, and five nouns. The ten target words for the study were significant, appropriate, establish, obtain, achieve, legislation, circumstance, maintenance, participation, and distribution.

4.3 Instruments

Reading tasks

The students met each target word in a short sentence. Since this study mainly emphasized the effect of the number of word repetitions on vocabulary learning, the short sentences were employed as the source of learning the target words. Although reading text was useful for vocabulary learning and provided repetitions to the words (Pellicer-Sánchez & Schmitt, 2010; Schmitt, 2008;

Zhu, 2015), too many reading contents could distract learners' attention from the target word. Therefore, the study employed a short sentence comprised of each target word. The short sentences were divided into ten sets. Each set contained ten sentences, each sentence consisted of a target word. The length of the sentence was about 12 words, and they were sample sentences taken and adapted from the Oxford Advanced Learner's Dictionary 8th edition. To develop the short sentences used in order to avoid reading difficulty, the sample sentences were checked and modified by the experts and some students until the target words were guessable.

Vocabulary tests

Receptive and productive vocabulary tests were employed in the study. There were ten target words in the tests. The receptive test was designed into the translation test. The target words were given to the students, and then they had to translate and write the meaning of the target words in their L1. Likewise, the productive test is the sentence completion test for the students to fill the target words in the provided sentences. There were ten sentences with blank space for each target word. Each sentence provided the first two letters of the target words to avoid using synonyms. There were four sets of each receptive and productive tests. The target words were rearranged their order in each set of both receptive and productive tests. Additionally, the tests were checked their validity prior to collect the data.

4.4 Procedure

This study spent approximately two hours and ten minutes. The students read three sets of short sentences, and then the receptive test was

registered. After completing the test, the productive test was given to the students. The productive test was collected again before the students continued the next set. The students did the same thing at the encounter five, seven, and ten.

4.5 Data collection and analysis

The data was collected from the tests. In the receptive test, if the students wrote the correct meaning of each target word, they got two scores. If they provided incorrect meaning, they received zero. However, if the students wrote synonym of the words, they got one point. Likewise, the students got two points if they wrote correct spelling in the productive test. If the students responded to each word but in incorrect spelling or form, they still got one score because this kind of mistake can be considered as they had partial knowledge of that vocabulary. In contrast, if they provided an incorrect response such as other words or synonyms, they got zero. Although answering synonym instead of the target words can be interpreted that they have partial knowledge of those words, it possibly inferred that the students used their background knowledge of vocabulary instead of focusing on the target words. After collecting the data from the tests, a one-way ANOVA and post hoc pairwise comparison were analyzed by the SPSS program. Additionally, the significance level was set at <0.5.

5. Results and discussion

To determine the differences among word repetitions, the ANOVA was performed using the scores on the two tests: receptive and productive tests. The independent variable was the numbers of word repetitions: 3, 5, 7, and 10 encounters. The results were as followed.

Table 1 The overall results of receptive and productive tests

Tests	Groups	Sum of Squares	df	Mean Square	F	Sig.
Receptive test	Between Groups	963.702	3	321.234	12.437	.000*
	Within Groups	3099.484	120	25.829		
	Total	4063.185	123			
Productive test	Between Groups	2453.742	3	817.914	34.636	.000*
	Within Groups	2833.742	120	23.615		
	Total	5287.484	123			

* $p < 0.05$

According to the post hoc test, it found that there was a significant effect on vocabulary knowledge in the receptive test when the numbers of word repetitions increased (Table 2). The result of the study revealed that there were significant differences between encounter 3 and 7, encounter 3 and 10, and encounter 5 and 10 ($p < 0.05$). The increased knowledge of word meaning might affect the context. Since informative contexts provided enough clues (Webb, 2007), encountering the target words in different informative contexts repeatedly could lead the students produce high scores and help them obtain words. Although the scores of the receptive test increased after the students had encountered words, the scores began to show a significant difference at the encounter 7. This result

was also consistent with Chen and Truscott (2010) who found that seven encounters can lead to meaning recall. According to the result, this could be interpreted that words' meaning could be learned at encounter seven.

Although the students were informed that dictionary was not allowed in learning, they still asked for using it since they were not able to guess for the meaning. Additionally, some ignored the words when they found it was difficult to guess from the context, so they shifted their attention to focus on productive knowledge. This result related to Zhu (2015) who mentioned that if the context does not provide adequate information for readers, they will ignore that word.

Table 2 Result of the receptive test

Encounter	Encounter	Mean Difference	Std. Error	Sig.
3	5	-1.58065	1.29089	.683
	7	-4.83871*	1.29089	.004*
	10	-7.16129*	1.29089	.000*
5	3	1.58065	1.29089	.683
	7	-3.25806	1.29089	.101
	10	-5.58065*	1.29089	.001*

Table 2 Result of the receptive test (Continued)

Encounter	Encounter	Mean Difference	Std. Error	Sig.
7	3	4.83871*	1.29089	.004*
	5	3.25806	1.29089	.101
	10	-2.32258	1.29089	.361
10	3	7.16129*	1.29089	.000*
	5	5.58065*	1.29089	.001*
	10	2.32258	1.29089	.361

* p < 0.05

Table 3 Result of the productive test

Encounter	Encounter	Mean Difference	Std. Error	Sig.
3	5	-4.87097*	1.23431	.002*
	7	-9.29032*	1.23431	.000*
	10	-11.64516*	1.23431	.000*
5	3	4.87097*	1.23431	.002*
	7	-4.41935*	1.23431	.007*
	10	-6.77419*	1.23431	.000*
7	3	9.29032*	1.23431	.000*
	5	4.41935*	1.23431	.007*
	10	-2.35484	1.23431	.308
10	3	11.64516*	1.23431	.000*
	5	6.77419*	1.23431	.000*
	7	2.35484	1.23431	.308

* p < 0.05

Additionally, table 3 presented the result of the productive test which found that there were significant differences between different encounters. The result showed that all encounters: encounter 3 and 5, encounter 3 and 7, encounter 3 and 10, encounter 5 and 7, and encounter 5 and 10, were significantly differences (P<0.05). It was found that the students began to productively obtain the target

words faster than in the receptive test as they began to gain the target words at the encounter five. Since the productive test mainly focused on orthography or spelling, the students rapidly gained the target words. This was consistent with Schmitt (1998, 2000) and Webb (2007) who stated that spelling is likely to be the first vocabulary knowledge aspect that the students acquired.

6. Conclusion

The study was to investigate the effect of word repetitions at different encounters on the vocabulary knowledge. The students learned the target words repeatedly in different sentences. The result found word repetitions had an impact on word knowledge. According to the result of the study, the students began to obtain their receptive knowledge at the encounter seven while the productive knowledge was gained at the encounter five. After they began to obtain the target words, their vocabulary knowledge was more developed in the next encounter. This showed the relationship between vocabulary knowledge and word repetitions since the knowledge was improved when the numbers of repetitions increased. This can be concluded that the more repetitions to a word lead to the improvement of vocabulary knowledge.

7. Limitations and suggestions

However, this study had some limitations. The students were tested all four sets of both receptive and productive tests within one day to indicate their short-term memory of learning vocabulary. Hence, the study did not examine their long-term memory. Therefore, it is doubtful whether the students retain the target words. Additionally, since the study spent a long time collecting data (two hours and ten minutes) with only one group of the students, the students would be confused and exhausted. This might decrease students' effort in doing the task. Another limitation was the tests. The students were asked to complete only one aspect of each receptive and productive tests which might not enough to examine their vocabulary knowledge since there were many aspects of vocabulary knowledge.

Therefore, further studies should test their long-term memory. This can investigate the effect of word repetitions in long-term retention. Moreover, students could be divided into groups to participate at different repetitions. This might decrease,

exhaustion students in learning vocabulary and increase their concentration on learning. Likewise, further studies should examine the improvement of other aspects of vocabulary knowledge affected by word repetitions. Students should be tested other vocabulary knowledge such as word form, syntax, or association. This could lead to investigate the impact of word repetitions in different aspects of vocabulary knowledge.

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