

Development of Academic English Vocabulary Achievement and Retention of Chinese Students Employing the Exercises on Using Context Clues Strategies

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Abstract

This study investigated the effect of teaching English vocabulary that emphasized Academic Words by employing the exercises on using context clues strategies to improve the students' English vocabulary achievement and retention. The current research explored the students' opinions toward the materials. The sample consisted of 26 Chinese students of Nakhon Pathom Rajabhat University who registered in Academic English Course, semester 2, the academic year 2020. The instruments used were the materials constructed using context clues strategies, an achievement test on retention, and questionnaires on students' opinions.

The data were analyzed through mean, standard deviation, and t-test. The research results

revealed that the students' English vocabulary learning achievement materials differed significantly at the 0.05 level. However, the students' vocabulary retention immediately after using the materials and 14 days after completing them did not show a difference. In addition, the students' opinions toward the materials were at a high level. The current study shows that creating exercises to enhance learning in specific areas, such as using strategies to learn vocabulary, can be examined. It is an opportunity for students to practice using the language and become more proficient.

Keywords: Academic Vocabulary, Context clues strategies, Material development, retention of vocabulary

Introduction

It is generally accepted that vocabulary knowledge is essential for learners who learn English as a second language and English as a foreign language. Wilkins (1972) points out that “without grammar, little can be conveyed; without vocabulary, nothing can be conveyed.” As Stahl & Nagy (2006) mentioned, vocabulary is a tool for conveying new ideas and learning. Accordingly, Coxhead (2021) asserted that learners with an extensive vocabulary in English usually have a high level of proficiency. Therefore, it can be considered that being well versed in English vocabulary can be an essential factor for success in studies and career advancement. Nevertheless, knowing all the meanings of English words is difficult, but it is not impossible.

According to previous studies, practicing vocabulary learning strategies by guessing meanings from the context is a guideline for interpreting arduous words for learners. Innaci and Sam (2017) found that by practicing guessing strategies from context, learners could identify the meaning of new words and increase the retention of remembering the meaning of words. Kupthanarot, Wichulata, and Chomaithong (2016) stated that context-based guessing strategies are essential vocabulary learning strategies teachers should use in language teaching. In addition, Thornbury (2002, as cited in Mart 2012) described the importance of contextual guessing skill as a skill that is important and beneficial to learners. As mentioned above, teaching learners to use a strategy to guess the meaning of words from the context is another appropriate teaching method because a word in English may have meaning changes according to the context in which the word appears.

Since English is a subject that requires skill to practice and learn the language's content, if there is no practice until proficiency, the skill cannot be improved if the learner has no prior knowledge of the content. Ultimately, the learner cannot use the language because of basic content knowledge. Similarly, Phopayak (2013, as cited in Anukakul & Pipatsrisawat, 2021) employed the exercises to enhance the students guessing the meaning of the words by using context clues strategy. The result revealed that the students were gaining a higher understanding of the word meaning. Furthermore, there were supplementary exercises, learning vocabulary using a guessing strategy from the context with the pattern of activities in

each step organized in a process, and repetitive exercises. Thus, learners gain confidence in using techniques to obtain the meaning of words and are truly satisfied with the learning.

In addition, drawing from the researchers' experience in teaching an Academic English Course to Chinese students, this academic terminology is essential to emphasize in the Academic English Course. Under investigation, the exercises on using context clues strategies were implemented and assessed in Academic English Course.

Research Objectives

The objectives of this research were as follows:

1. to compare the students' achievement before and after using the exercises on using context clues strategies;
2. to compare the students' retentions before and after using the exercises; and
3. to investigate the students' opinions toward the exercises.

Research Questions

The research questions for this study were:

1. Do the Exercises on Using Context Clues Strategies improve the students' English vocabulary achievement?
2. Does teaching English vocabulary focusing on Academic Words significantly affect Chinese students?

3. What are the students' attitudes towards using the Exercises on Using Context Clues Strategies?

Literature Review

1. The Characteristics of Academic Word List (AWL)

For studying at the tertiary level, especially at the undergraduate level, the learners are required to possess a high level of four language skills, such as listening, speaking, reading, and writing. To understand the academic concepts they are learning, learners need to understand the content vocabulary in the literary context. Schmitt (2008) states that many students at the academic level are unable to master the AWL vocabulary. Even though learners can identify about 3,000 words, they may not be able to use these words accurately in their writing. Academic vocabulary is words that are traditionally used in intellectual dialogue and text. Specifically, it refers to words that are not necessarily common or frequently encountered in informal conversation. Marzano (2004) indicates that academic vocabulary and academic terms allow learners to analyze, infer, and provide discipline-based reading, listening, speaking, and writing conclusions. The Academic Words List (AWL) developed by Coxhead (2000) was based on academic texts made into corpora for computer-based analysis. It consists of 570 words from a corpus of 3.5 million running words across four disciplines: Arts, Commerce, Science, and Law. Families cover approximately 10 % of academic written texts, and the list is divided into ten sub-lists. The Academic Words List was employed to

survey the students' vocabulary knowledge in this current study. Then, 70% of the unknown words were used in the supplementary exercises on using context clues strategies.

2. An Implementation of Context Clues as a Vocabulary Learning Strategy in EFL

Classroom

One of the strategies to learn vocabulary is the context clues strategy. This strategy aims to help language learners improve their vocabulary abilities by inferring meaning in the context given in the reading. As Nation & Coady (1988) points out, context clues are defined as “morphological, syntactic, and discourse information in the given text which can be classified and described in terms of general features.” Moreover, Zhou (2010) states that context clues help the students learn semantic links, which allow them to remember vocabulary items. The context clues strategy has also been tested and proven to increase language learners' vocabulary (Ebrahimian & Nabifar, 2015; Malik, 2016; Wilson, 2013). It can be considered that the strategy of using context clues should be taught to English learners. This study focused on the teaching method of using context clues strategy to guess the meaning of unknown words in English. In addition, the exercises were created in four steps to practice using the guessing strategy from the context.

Methodology

Research Design

The methodology used in this study was pre-experimental research, a quantitative research study. The type of study was a pre-experimental design for a one-group dependent pretest-posttest method (Best, 1977).

Participants

The participants were selected by a simple random sampling technique, consisting of 26 Thai for Career, Chinese students from the Faculty of Humanities and Social Science, Nakhon Pathom Rajabhat University. They enrolled in the Academic English course during semester 2 of the academic year 2020.

Research Instruments

1. Classroom Material: The Exercises on Using Context Clues Strategies

The Exercises on Using Context Clues Strategies is made up of eight-unit on using context clues strategies. An assessment assures the quality of lesson plans of three experts in teaching and material development. The teaching material was created by adapting the process of guessing meaning from the context (Nation, 2003). The study was improved and tried out within 3 and 10 students before the implementation. Besides, the vocabulary used to create the exercises was obtained through a vocabulary survey and selected vocabulary from the Academic Words Lists (Coxhead, 2000) consisting of 570 words. The vocabulary survey was created by asking selected students to write the meanings of the words they know and do

not know. Then, the researcher selected the words that the students did not know the meaning of, which was 70% of the 570 words. One hundred twenty words were selected and divided into eight lessons. The exercises included unit exercises in four steps to practice using the guessing strategy from the context: 1) The reading process, Read, allows learners to practice finding meanings from context pointers in sentences. 2) The Contextual Training Step (Look) is an activity that allows learners to practice finding the context hidden in a sentence. 3) Guessing process (Guess) is an activity that allows learners to practice using strategies to guess the meaning of words from the context. 4) Check procedure (Check) is an activity that allows learners to check the use of a strategy to guess the meaning of the words from the context whether the meaning of the acquired vocabulary is correct or not. The contents of each unit included Unit 1 Direct Definition clues, Unit 2 Restatement Clues, Unit 3 Similarity Clues, Unit 4 Contrast Clues, Unit 5 Cause and Effect Clues, Unit 6 Example Clues, Unit 7 Explanation Clues, and Unit 8 Surrounding words Clues. From the present study, the exercise efficiency was 76.29/82.69, which was higher than the specified threshold of 75/75.

2. An English Achievement Test on the Ability to Use the Strategy to Guess the Meaning from the Context

The English achievement test was used as a pre-test and post-test to determine students' ability to use a strategy to guess the meaning from the context. The test used the guidelines for creating a vocabulary test based on the concept of Nation (Nation, 2003) to measure

vocabulary ability by using a strategy to guess the meaning from the context. It consisted of 40 multiple-choice questions; each question and the answer were designed concerning the course contents and objectives. Three experts validated the contents and accuracy of word choices in each item in testing and evaluation. The test was revised according to the experts' comments. The revised test was pilot tested by 25 Chinese students who previously participated in the Academic English course. The obtained scores were analyzed for the quality of the individual test items by the SPSS program to determine the difficulty items (p) and the discrimination (r) by examining the difficulty items (p) according to the criterion between 0.20-0.80. The power of discrimination (r) was according to the criteria from 0.20 and above. The difficulty of the test was between 0.25-0.80, and the discrimination was between 0.25-0.75. Then the test was taken to find the confidence value. (Reliability) The test used Kuder-Richard's Formula 20 (KR-20) Kuder and Richardson (1937). The confidence value of the whole test was 0.70 or higher, and the entire test got a confidence value of 0.92.

3. The Questionnaires

The questionnaire investigated the students' opinions toward the supplementary exercise on guessing the meaning from the context clues strategy, and it was revised in accordance with three experts in testing and evaluation. The test was revised following the experts' comments; then, pilot-tested by 25 Chinese students who previously participated in the Academic English course. The questionnaire used the Likert rating method to survey the

students' opinions toward the material constructed in the classroom consisting of 10 questions, divided into four opinion levels, including; form, content, activity, and learning benefit. The opinions were divided into five levels. To collect the data, the researcher used the SPSS program to process the gathered data using the alpha coefficient formula (Cronbach, 1974) with a confidence value of 0.91.

Procedures

The research was conducted in the second semester of the academic year 2020. The students were enrolled in the Academic English course. This course aimed to develop English for academic purposes; listening, speaking, reading, writing, and thinking skills; reading academic texts, summarizing main ideas, expressing opinions, writing paragraphs, using references and citations, listening to lectures, giving presentations, asking and responding to questions, and exchanging ideas. The students met in class once a week for three hours, and the length of the semester was 16 weeks. The study was conducted over 14 weeks. Before the study, the researcher asked the students to do an English Achievement test of ability to use the strategy to guess the meaning from the context before studying; this pre-test consisted of 40 items and took 60 minutes for testing. Then, the researcher clarified the study objectives and explained how to learn by using the exercises on using context clues strategies. After that, the teaching was done for eight lessons. The researcher asked the students to do the post-test to compare their ability to guess the meaning from the context. The questionnaire for students'

opinions toward the exercises on using context clues strategies was used to check the effectiveness of the material constructed on the ability to guess the meaning from the context of the students.

Data Collection and Data Analysis

The data collection procedure was divided into three stages. The first stage was before the development of the materials, during the implementation, and after the implementation. The statistics used to analyze data from this study were the basic statistics such as percentage, mean, and standard deviation. E1/E2 analyzed the efficiency of course materials at the level of 75/75 (Promwong, Netbprasert, & Linsagun, 1977). The pre-test and the post-test data were analyzed by t-test and the evaluation of the effect size.

Results

Part 1 The development of academic English vocabulary achievement and retention of Chinese students by employing the exercises on using context clues strategies. The research results were presented in 3 parts as follows:

Table 1

Mean, S.D. and t-Test of Student's Ability on Learning English Vocabulary Meaning by Using Context Clues Strategies

| Test | N | Mean | S.D. | t | df | Sig. |
|-----------|----|-------|------|--------|----|------|
| Pre-test | 40 | 22.11 | 2.70 | 16.85* | 24 | 0.00 |
| Post-test | 40 | 31.07 | 3.13 | | | |

Note: *significant level of .05 ($P \leq .05$)

Table 2 shows the students' ability to learn English vocabulary by using a context clues strategy according to the pre-test and post-test. After learning by the supplementary exercise on using context clues strategies, the ability was significantly higher than before their entry at 0.05, which demonstrated the student's ability to employ the exercises on using context clues strategies score before and after learning.

Part 2 In comparing the retention of the students' vocabulary remembering after learning by using the exercises on guessing the meaning from context strategy immediately and after 14 days of learning with the exercise, is there any difference? By employing the t-test statistics, the analysis results are shown in Table 2.

Table 2

Mean, S.D. and t-Test of Student's Ability on Learning English Vocabulary Meaning by Using a Context Clues Strategy Immediately and Recall Test (after 14 days)

| Test | n | mean | S.D. | T | df | Sig |
|-------------|----|-------|------|------|----|------|
| Post-test | 40 | 31.07 | 3.13 | 1.08 | 24 | 0.06 |
| Recall test | 40 | 30.53 | 2.80 | | | |

Table 2 shows the student's ability to learn English vocabulary meaning using a context clues strategy after using the exercises 14 days later. It indicates that the retention of the students' vocabulary memorization after learning using the exercise to guess the meaning from context immediately and after 14 days of learning with the exercise did not differ statistically with a level of 0.05.

Part 3 To investigate the students' opinions toward the exercise on guessing the meaning

from context strategy, the result is shown in Table 3.

Table 3

Mean and S.D. of Students' Opinion toward the Exercise on Guessing the Meaning from Context Strategy

| Statement | Mean | S.D. | Level of Agreement |
|---|------|------|--------------------|
| 1. The alphabets were clear and easy to read. | 3.99 | 0.55 | High satisfaction |
| 2. The activities presented in each stage were clear. | 3.84 | 0.73 | High satisfaction |
| 3. The difficulty of the contents was consistent with the learning level. | 3.86 | 0.61 | High satisfaction |
| 4. The contents were related to the class's time. | 4.00 | 0.57 | High satisfaction |
| 5. The Read activity provides enough exercises to practice guessing strategies from the context of words. | 3.86 | 0.61 | High satisfaction |
| 6. The Look activity is an activity that makes one sufficiently knowledgeable in using a strategy to guess the meaning of a word from the context of words to take the next step. | 4.04 | 0.57 | High satisfaction |
| 7. The Guess activity is an activity that practices using a strategy to guess the meaning of words from the context of the words I have learned. | 3.95 | 0.65 | High satisfaction |
| 8. The Check Activity is an activity that checks the use of a guessing strategy from the context of a word. | 3.70 | 0.60 | High satisfaction |
| 9. The exercise can develop the ability to use strategies to guess the meaning of words and use them appropriately. | 3.86 | 0.72 | High satisfaction |
| 10. The exercise is an extensive way of vocabulary learning. | 4.04 | 0.57 | High satisfaction |
| Total | 3.91 | 0.61 | High satisfaction |

Table 3 shows the students' opinions toward the exercise constructed in the class. It indicates that the students had high positive satisfaction in the appropriateness of the activity,

as can be seen from the statement “the Look activity is an activity that makes one sufficiently knowledgeable in using a strategy to guess the meaning of a word from the context of words to take the next step” (mean 4.04, and standard deviation 0.57). For the benefits of the exercises, the students felt that “The exercise is an extensive way of vocabulary learning” and they gained more vocabulary knowledge and skills from the lessons (mean 4.04, and standard deviation 0.57). Besides, the students were satisfied with the contents and form as the contents’ difficulty was related to the class’s time. (mean 4.00, and standard deviation 0.57). Overall, the materials constructed were high, with a total mean of 3.91.

Discussion and Conclusion

The development of Academic English vocabulary achievement and retention of Chinese students employing the exercises on using context clues strategies was developed into eight lessons. In addition, engaging the words from the Academic Words List (AWL) created by Coxhead (Coxhead, 2000) that are frequently found in the academic area such as academic writing and reading encouraged students to practice using context clues strategies. In addition, the students elicited the vocabulary by surveying the words that they do not know the meaning of before learning to ensure that they will learn new words because an unfamiliar word will arouse learners’ interest. As Robert (1988, as cited in Platapianthong, 2019) pointed out to the selection of vocabulary for teaching, the teacher should pick out the vocabulary related to the learners’ experiences and interests since it will be beneficial for

learners to use in their daily life.

As the result of the students' ability in learning English vocabulary by using a context clues strategy from the pre-test and post-test after learning by the exercise on using context clues strategies was significantly higher than before their entry at 0.05, this was caused by the contents and activity approach in teaching and learning which worked effectively with teaching Academic English. Furthermore, every step allows learners to use a strategy to guess the meaning of English words from the context and put them into practice. Likewise, Bishop et al. (2009, as cited in Kupthanarot et al., 2016) mentions that teachers should separate strategies to guess the meaning of words from the context to teach separately by allowing learners to get to the point of different contexts. However, teachers should provide details to enable learners to use the vocabulary with regular practice, and connect knowledge of words and meaning. These skills are derived from observing words or sentences close to unknown words and acquired from employing guessing strategies.

The current study also compared the difference in scores between the post-test scores and the recall test after 14 days of study. It was found that the difference in the students' vocabulary learning achievement after 14 days was not statistically significant, i.e., the student's retention in memorizing vocabulary was not different from the exam immediately after studying. This concern with the students has been practicing guessing the word meanings by repeatedly employing the contextual guessing strategies from the exercises. It

has affected the durability of the learner's vocabulary learning by repeating the exercise several times. Similarly, the previous study of Thawai (2017) indicated learners' retention in learning vocabulary immediately after learning English word games and after learning English word games 14 days later. It is no different because the learners have repeatedly been practicing vocabulary; the variety of activities enhances their retention. As Atkinson & Shiffrin (1968) described the nature of the brain's dual memory function (A Dual Model Store of Memory), Long-term memory formation is caused by review preventing memory decay from short-term memory, and anything, if it is in short-term memory for a long time, will have more chances to be embedded in long-term memory. It is proved through learning English vocabulary by employing the exercise on using context clues strategies to which instructional activities are related. If students were taught adequately comprehending and practicing skills, they would lead to persistence in learning the correct vocabulary used in different activities, and the learner's vocabulary knowledge became more durable.

The questionnaire reflected the student's satisfaction with implementing the supplementary exercises in the classroom and found that the students had a reasonable opinion on the exercise. (mean 3.91 and standard deviation 0.61) Furthermore, from the average result of the total number of 10 items from all exercises, totaling eight chapters, it was found that the students had opinions on the form and contents, activities, and benefits of learning on average; all points are good. The item that received the highest average score in

form and contents was Item 4; the contents were related to the class's time (mean 4.00, and the standard deviation is 0.57). The highest mean level in the activity was item 6; the Look activity is an activity that allows the students to be sufficiently knowledgeable in using a strategy to guess the meaning of a word from the context of words to take the next step (mean of 4.04 and standard deviation of 0.57). The highest mean score in terms of benefits of learning was item 10; the exercises helped increase learning more vocabulary (mean 4.04, standard deviation 0.57). As a result, it indicated that the students had a reasonable opinion that the overall exercise was good. It is caused by the supplementary exercises with the pattern of activities in each step organized in a process and repetitive exercises. Thus, learners gained confidence in using strategies to understand words' meaning and were truly satisfied with the learning.

Limitations of the Study

The participants in this study were 26 Thai for Career, Chinese students from the Faculty of Humanities and Social Science, Nakhon Pathom Rajabhat University. Thus, the findings might not be generalized to other students.

Suggestions

The research results above show that creating exercises to enhance learning in specific areas, such as using strategies to learn vocabulary, can be examined. It is an opportunity for

students to practice using the language and become more proficient. In the process design, the

activities used in training must be consistent and easy to learn, and the implementation must

focus on the learners to practice using strategies according to the learning objectives.

Moreover, the design of lessons is related to teaching vocabulary; therefore, the teachers

should explore the list of words that learners know and do not know their meanings before

teaching. This will allow teachers to select the right words to teach based on their level of

knowledge since vocabulary is an essential fundamental element. Creating a lesson if the

learners already know the meaning and how to use the words can cause boredom in learning.

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