

Effects of using Contextual Clues on English Vocabulary Retention and Reading Comprehension

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Abstract— Vocabulary is one of the most pivotal but complex aspects to English language students. To achieve the knowledge of English vocabulary requires students to have specific learning strategies. Using contextual clues is considered one of the essential strategies that can guide students to figure out the meanings of unknown words. This study, therefore, aims at exploring the effects of using contextual clues on English-majored students' vocabulary retention and reading comprehension at Bac Lieu University, Vietnam (henceforth called BLU). Sixtytwo second-year English majored students were randomly selected for the study and divided into the experimental and control groups. Quantitative data were collected through three instruments namely, pre-test, experiment and post-test. The results revealed that using contextual clues positively affected students' vocabulary retention and reading comprehension. This study is expected to shed light on students' vocabulary and reading's improvement through the use of contextual clues in Vietnamese context and in other similar educational contexts as well.

Keywords— vocabulary learning strategies, contextual clues, vocabulary retention, reading comprehension, Vietnamese context.

I. INTRODUCTION

In the recent development of English language, the primary goal of English teaching curriculum is to develop students' communication skills. Hence, to achieve this goal, the effective integration of the four macro English skills and language elements can be considered as a core task in English language teaching in which vocabulary is of paramount importance in developing these skills. Meanwhile, mastering all English skills is a very complicated task unless the students possess good knowledge of vocabulary. Nation (2001) claims learning vocabulary plays a critical role in all English language skills (i.e. listening, speaking, reading, and writing. Folse (2004), furthermore, argues that a sizable possession of vocabulary knowledge enables students to acquire what they read or hear; and without vocabulary, no communication is possible. Also, it is undeniable that

vocabulary is an essence of reading comprehension. Biemiller (2005) says that teaching vocabulary will not ensure success in reading, just as learning to read words will not ensure success in reading.

Nonetheless, in order to gain good knowledge of vocabulary in the second language effectively, it is necessary for students to have practical vocabulary learning strategies to learn new words more effectively and contribute to their reading capacity more positively. Many researchers have agreed that using contextual clues is one of the most effectively used strategies to learn new words. Mart (2012) stresses that learning through context is very much meaningful for students' vocabulary learning. Besides, using contextual clues along the line of the Oxford's (2011) Strategic Self-Regulation Learning (S2R) Model indicates students are more independent and active when they apply strategic learning.

However, not many language teachers can recognize the importance of using contextual clues on vocabulary and reading acquisition. In addition, there are still a large number of language students facing problems in mastering academic vocabulary and reading by the lack of effective vocabulary learning strategies. Therefore, this study was conducted to find out the extent to which using contextual clues enhances students' vocabulary and with an attempt to answer the research questions: To what extent does using contextual clues affect English-major students' vocabulary retention and reading comprehension?

II. LITERATURE REVIEW

Contextual clues are clues pedagogically or naturally put in to the texts to support for students to understand the meaning of novel words. According to Nagy and Scott (2000), students use contextual clues to infer the meaning of a word by looking closely at surrounding text. It means the unknown words can be guessed through the reading context where these words exist. Contextual clues provide information about how a word fits in a sentence and with the ideas discussed in it.

Over the years, the significance of contextual clues in learning vocabulary and reading has been recognized by linguists. The context which contributes to vocabulary learning has intuitively made sense to and has been taken for granted by educators (Beck, McKeown & Kucan, 2008). As Pennock (1979) states, context clues are a hint for the meaning of an unfamiliar word (p.36). By studying these surrounding words and their relationships to the unknown word, readers may be able to gain the meaning of that word. Learning from context is an important avenue of vocabulary growth (Nagy, 1988, p.7). Clues extremely play a very powerful role in reading comprehension and they are the key factors to comprehend a text widely and learn new words specifically. It is very significant for students to learn a new word from a context to improve their vocabulary and understand the message in the text.

There are many types of contextual clues according to some researchers: Langan (2014); Tompkins (2016); Robb (2013); (Gerace, 2001) which can be summarized as several commonly used types: definition, example, synonym, antonym, contrast, logic, general

sense of sentence, part of speech, grammar and root word and affix; and all these types were used in this study.

In both international and Vietnamese context, the effects of contextual clues on language students' vocabulary retention and reading comprehension have been conducted by many researchers. Concretely, Rokni and Niknaqsk (2013) carried a study to investigate the effect of context clues on Iranian EFL students' reading comprehension. The participants were 60 intermediate students taking 3- credit General English course at Golestan University divided into two groups: the context group and the control group. The researchers gave the individual background questionnaire for groups, English proficiency test and a reading test as pre-test. Then, the context group practiced different kinds of context clues as treatment for duration of eight sessions, while the control group has no training. At the end of the project, a post-test was given to both groups to evaluate the effect of the clues on the learner's reading comprehension. The findings displayed that the experimental group outperformed the control group in the post-test. Besides, the research of Trinh Quoc Lap (2017) was employed to figure out the extent to which contextual clue instruction improves students' capacity to infer the meaning of words from context as well as exanimate students' perceptions towards this strategy. Twenty six eleventh English graders in an upper-secondary school in Can Tho city were instructed to apply contextual clues to guess meanings of novel words. Quantitative and qualitative data were collected from achievement tests and students' reflection. The results indicated an outstanding improvement in students' ability to guess meaning of unknown words using this strategy and it also showed students' positive perception towards using this strategy.

III. METHODOLOGY

3.1 Participants

This current study is a quantitative research with a pre-test-experiment-post-test design which was carried out at BLU, Bac Lieu Province, Vietnam. It involved 62 second-year English majors who were learning the module of Reading 4 in the second semester of the academic year 2018-2019. They were randomly divided into two treatment groups: Experimental group (2 males

and 29 females) and Control group (3 males and 28 females).

3.2 Research instrument

In order to collect the quantitative data and answer the research question, the instruments employed in this study were the pre-test on students' vocabulary knowledge and reading comprehension ability before the treatment, the experiment and the post-test on students' vocabulary retention and reading comprehension ability after the treatment.

3.2.1 Pre-test

It was a self-constructed test consisting of two parts administered by the instructor (researcher). In the first part, the researcher designed 20 short sentences in which participants of two groups guessed the meanings of words bold in these sentences based on the contextual clues. The first ten questions were in the form of multiple choices. There were four options for them to choose the meaning of the words from A to D. However, for the last, they were required to write down the meanings of the words by themselves. In the second part, two reading selections with 10 multiple-choice questions in total were given the participants. The two reading texts were selected from TOEFL®iBT (Test of English as a Foreign Language, Internet-Based Test).

3.2.2 Experiment

The experiment is one of the steps in conducting the experimental research. During the experiment, researchers must endeavor to follow tested and agreed-on procedures (Cohen, Manion and Morrison, 2007). In this study, for the teaching procedure of the experimental group, there were five different topics related to five different reading selections in the Reading 4. For each topic, the instructor introduced a list of vocabulary taken from the reading selection to students in advance. The responsibility of students in this group was to put a check mark next to the words they had already known. To the unknown words, they were not permitted to use dictionary to find their meanings. Instead, students were instructed the strategy of guessing meaning from contextual clues. Also, they had a chance to practice this strategy by doing some vocabulary and reading tasks. Finally, they worked with the reading selection and then applied this strategy to

do some tasks related to the reading including exploring the topic, main idea and answering information questions. One of the tasks the students required to do was guessing the meanings of the unknown words from the list of vocabulary introduced at the beginning of the lesson. For the control group, they have similar learning procedures; however, the only difference was that instead of being instructed with the contextual clue strategy, they used dictionary to look up the meanings of the words in the vocabulary list before reading.

3.2.3 Post-test

The post-test is similar to the pre-test in terms of format, types of tasks and numbers of tasks with 20 questions for guessing meanings of words from contextual clues and two reading selections with 10 question.

3.3 Data collection and analysis procedures

The study was conducted in fourteen weeks. On the first week, a pre-test was conducted to examine students' vocabulary and reading level before starting the treatment. From week two to twelve, the instructor (also the researcher) instructed the reading module for two groups, but the experimental group was instructed with the strategy of guessing the meaning from the contextual clues while the control group received no treatment. At the end of the module, both groups took the post-test to find out whether there were any differences between the two groups. All in all, after the above steps had ended, the results were analyzed by using the software SPSS via tools of Descriptive Statistics, Independent Samples T-test and Pair Samples T-test.

IV. RESULTS AND DISCUSSION

4.1. The comparison of the mean scores of vocabulary and reading test between control group and experimental group before the treatment.

To compare the mean difference and to prove the homogeneity of the control group and the experimental group in their ability of using contextual clue strategy before the treatment, the Descriptive Statistics and Independent Samples T-test were run to analyse the scores of the pre-test. The results were displayed as follows:

Table 1. Descriptive Statistics of the mean scores of the control and experimental group in the pre-test

Conditions	N	Minimum	Maximum	Mean	Std. Deviation
Control	31	3.70	6.80	5.4258	.99732
Experimental	31	3.80	6.70	5.3774	.91057

With the results shown in Table 1, the total mean score of the control group ($M=5.4258$) and that of the experimental group ($M = 5.3774$) were just above the average on the scale of “1 as minimum” to “10 as maximum” which indicates that before the treatment, the participants had a little capacity of guessing word meanings from contextual clues in their vocabulary learning and reading comprehension. Furthermore, the mean difference between two groups ($MD= .04839$) was very low. It highlights that two groups had the same initial level of using contextual clue strategy on their vocabulary and reading learning.

Moreover, the results in the Independent Sample t-test signify that the Levene’s Test for Equality of Variances is non-significant. The Sig (2-tailed) value as .843 was much higher than .05. It means the homogeneity of the control and experimental group in vocabulary learning and reading comprehension before the treatment was confirmed. In other words, before the treatment, the levels of vocabulary and reading learning of two groups were the same.

4.2. The comparison of the mean scores of vocabulary and reading test between control group and experimental group after the treatment.

Table 2. Descriptive Statistics of the mean scores of the control and experimental group in the post-test

Conditions	N	Minimum	Maximum	Mean	Std. Deviation
Control	31	4.20	7.20	5.9839	.82869
Experimental	31	5.30	8.80	7.2645	.89314

With the results shown in Table 2, after the treatment, the total mean score of the vocabulary and reading test of the experimental group ($M=7.2645$) was very much higher than that of the control group ($M = 5.9839$) with the mean difference between two groups ($MD= 1.28065$). In addition, an Independent Samples T-test was also conducted to evaluate whether there is a significant difference between two groups in the ability of using contextual clues in vocabulary and reading test after the treatment. The results also signified that the Levene’s Test for Equality of Variances is statistically significant. The Sig. (2-tailed) value is .000 which indicates that after the treatment, the participants’ ability of using contextual

clues between two groups was significantly different: the level of using contextual clues in vocabulary and reading learning of the experimental group was greater than that of the control group.

4.3. The comparison between the results of pre-test and post-test within each group.

To compare the mean scores of the participants’ ability of using contextual clues in vocabulary learning and reading comprehension within the control group and the experimental group before and after the treatment, the Descriptive Statistics and Paired-Samples T-test were run to gain the participants’ performance. The results were reported as follows:

Table 3. Descriptive Statistics of the mean scores within the control group and the experimental group before and after the treatment

Groups	Tests	N	Minimum	Maximum	Mean	Std. Deviation
Control	Pre-test	31	3.70	6.80	5.4258	.99732
	Post-test	31	4.20	7.20	5.9839	.82869
Experimental	Pre-test	31	3.80	6.70	5.3774	.91057
	Post-test	31	5.30	8.80	7.2645	.89314

From these two tests, it can be shown that after the treatment, both different treatment conditions' performance, the control group and the experimental group, on vocabulary and reading learning increased from the pre-test to the post-test. Concretely, for the control group, the mean score creased from the pre-test ($M = 5.4258$) to the post-test ($M = 5.9839$) with the mean difference ($MD = .55806$). Furthermore, the Sig. (2-tailed) value as .000 indicates there was a significant difference of the participants in the control group before and after the treatment. For the experimental group, the mean score creased from the pre-test ($M = 5.3774$) to the post-test ($M = 7.2645$) with the mean difference ($MD = 1.88710$). Moreover, the Sig. (2-tailed) value as .000 indicated there was a significant difference of the participants in the experimental group before and after the treatment.

However, when considering the values of mean difference between the control group and the experimental group, it can be clearly observed that the mean score of the experimental group was much greater than that of the control group after the treatment. In other words, the mean score of the experimental group was significantly developed after the treatment.

The students' improvement of vocabulary retention and reading comprehension when using contextual clues could be explained by some reasons. First, using contextual clues can be considered as a beneficial strategy to promote students' ability of seeking the information and making prediction of unfamiliar words in context. (Clarke & Nation, 1980). In other words, students who were treated by contextual clue strategy had the better performance on word meaning's prediction Moreover, in reading process, sometimes the

students are unable to acquire the information from the text because they cannot use their ability of prediction to identify the meaning of unfamiliar words in the text (Brown, 2015). This finding reinforces the study done by Karbalaee, Amoli and Tavakoli(2009) that when the use of contextual clues could be effective in improving college students' abilities to determine the meaning of unknown words while reading. It also supports Nash and Snowling's (2006) study. They drew the conclusion for their study that using context clues to identify meanings leads to an improvement for students in reading comprehension.

V. CONCLUSION

The results have indicated that students' vocabulary retention and reading comprehension could be enhanced by using contextual clues. It was proven by the better performance in the post-test of the experiment group in comparison with the control group. In other words, after treated with contextual clues, students' vocabulary retention and reading comprehension has been improved even though they adapted some contextual clue types more dominating than others.

The findings of the study have shed the light on following implications and recommendations for college English teachers and college English-majored students. The students' improvement of vocabulary retention and reading comprehension implies that the utilization of contextual clues could lead to the successful achievement in vocabulary and reading learning. In fact, using contextual clues is a major element in enhancing vocabulary retention and reading comprehension as Kiani (2011) stipulates that contextual clues positively influence on students' comprehension of texts. Student's own

knowledge and skills of exploring new words from different contexts play an important role in the comprehension of new concepts, ideas and principles; and by studying these surrounding words and their relationships to the unknown word, students may be able to gain the meaning of that word (Nagy, 1988). Therefore, it is strongly recommended that both teachers and students should make good use of contextual clue strategy on teaching as well as learning vocabulary and reading.

Although the study has reached its aims, there are some unavoidable limitations due to the limited numbers of participants and the shortage of time.

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