International Journal of Science Culture and Sport
March 2014; 2(1)
ISSN : 2148-1148
Doi : 10.14486/IJSCS41

The Comparison between Contextual Guessing Strategies vs. Memorizing a List of Isolated Words in Vocabulary Learning Regarding Long Term Memory

Leyla Vakili SAMIYAN*, Sara Raouf KHORASANI**

* Imam Reza International University of Mashad, IRAN

Email:leylasamiyan@yahoo.com

** Islamic Azad University of Quchan, IRAN

Email:sara.raouf16@yahoo.com

Abstract

Guessing the meaning of unknown vocabularies within a text is a way of learning new words which is named textual vocabulary acquisition. The main purpose of this study is to investigate the effectiveness of a textual guessing strategy on vocabulary learning at the intermediate level. Textual guessing strategy is to guess the meaning of vocabularies with the help of surrounding words or sentences in the co-text without any translation.

This paper reports the findings of two quantitative studies conducted on English language learners with the Intermediate 2 level of proficiency in Kavosh foreign language institute, Mashhad, Iran. Twenty male and female attendants were selected and assigned to 'context' and 'non-context' groups. The context group received an instruction to infer the meaning of new words while the non-context participants were treated as learning new vocabularies individually (autonomously).

The result of the independent sample t-test at the post-test stage revealed that the probability value of t-test with an equality of variances assumption is lower than 0.05 (0.04700). So this result represented that there is a meaningful difference between the experimental group and the control group considering their amount of learning. The results indicated that textual guessing strategy had more effect on their long term memory. It was also revealed that the words learned through context are used more frequently than those learned in isolation in the speaking repertoire of the participants.

Key Words: contextual guessing, isolated words, memory

1. Introduction

One of the most significant parts of each language is its vocabulary. Vocabulary learning plays an essential role in learning a foreign language. Here come three main reasons to shed light on the importance of vocabulary mastering:

By development of vocabulary, reading comprehension will improve. All areas of communication- speaking, listening, reading and writing- will improve through vocabulary development. It helps to improve people's academic and social competence and confidence. The purpose of vocabulary learning should include both remembering words and the ability to use them automatically in a wide range of language context when the need arises (Mc Carthy, 1984).

This paper brings together the findings of two quantitative studies which were carried out in two classes – experimental and control groups – at Kavosh foreign language institute between the 8th and 12th months of the year 2013. The research was aimed at establishing firstly, how such textual strategy can contribute learning vocabularies for a long time without forgetting them and secondly, how students and teachers can be prepared in order to gain the maximum benefit from this learning activity. In the following section a brief overview to the previous researches are presented.

Research questions:

1) What is the effect of contextual guessing strategy on vocabulary learning?

2) Does the vocabulary learned within context remain in mind much more than those learned in isolation?

3) In which way is learning vocabulary easier:

a) Within the context?

b) Out of the context?

William E.Nagy and Richard C.Anderson (1985) had searched about "Learning Word Meanings from Context during Normal Reading". The 352 students in third, fifth and seventh grades read narrative passages selected from grade-level textbooks, and after six days were tested on their knowledge of difficult words from the passages. Effects of word and text properties learning from context were examined in some detailed.

Word properties investigating included length, morphological complexity and part of speech. Text properties included the strength of contextual support for each word and its readability was measured by standard formulas. Word properties difficulty was related to learning from context. in text properties, the proportion of unfamiliar words, influenced on learning context.

Another research which is related to this study is "The effect of context on Incidental vocabulary learning". A group of Japanese university learners of English as foreign language (EFL) in 2008 revived ten target words in three sets of ten short contexts. A surprise vocabulary test that measured memory of form, recognition of form, memory of meaning, and recognition of meaning was fulfilled after the treatment. The results represented that the group which read the contexts containing more contextual clues had higher scores on both tests of meaning.

The next investigation that will be mentioned is "Inferring the Meaning of Verbs from Context" by Peter Wiemer-Hastings, Arthur C.Graesser and Katja Wiemer-Hastings (1998). In this study they used a computational model to infer meanings. In order to explore the space of possible predictors that the system could use to infer verb meanings, they performed a statistical analysis to test the computational system. They also evaluated human performance at inferring the verb in the same set of sentences. The overall number of correct predictions for humans was quite similar to that of the computational system, but humans had higher scores.

A further research which was carried out by Seibert investigated another dimension of learning new vocabulary. Seibert (1927), studied three conditions : Studying aloud, studying aloud with written recall, and studying silently, and found that the first condition always produced better results than the other two. He then added another factor and studied the time for relearning after two, ten and forty two days and got again that learning aloud was much more efficient than the other two conditions.

The present study was designed to compare the degree of learning English vocabulary of the contextual guessing with the degree of learning same English vocabulary individually, with general or specific instructional objectives increases the amount learned during fixed instruction time. In this study we are trying to answer to three questions.

2. Methodology

Participants:

Twenty Intermediate students (an equal number of males and females from the Kavosh Language Institute in Mashhad) with an age mean of twenty were selected through non-random judgment from fifty students as the participants in this study by getting above three in their pretest. All of the participants had prior experience of attending Language institutes. The subjects were randomly divided into two groups, one as experimental group, namely context and the other one as control group namely individual or non-context.

Design:

In much of research, it seems quite unlikely that researchers can fallow a true experimental method. In this study one of the most important points is pretest, because for this research our participants should be similar and homogeneous in language ability. The other characteristic is the cause variable which is the main reason of changes on dependent variable; this variable is called a treatment in the context of experimental research. On the other hand we have a control group which didn't receive any treatment. This group is called control group because, the researcher tries to make sure that the changes in the behavior of the experimental group do not occur in the behavior of the control group. We tried to give an ineffective and irrelevant treatment to the control group which is called placebo. The last character in this study that measures the effect of the treatment is posttest. In this study the purpose of the posttest is to observe the differences between the group's behaviors.

Instruments:

In the current study a pre- and a post test were used as the required instruments. Pretest was composed five items on reading, five items on listening and five items on interview, in the multiple choice, true-false and definition formats. The reason for choosing these formats was that these students were familiar with these formats in their English book at

language institute. The text and listening were selected from the Cutting Edge (2005) to represent our authentic materials. The reason for pretest in this study was a sample most likely includes members of similar qualities. The posttest was composed twenty items on vocabulary in the blank, matching, definition and multiple-choice. The reason for choosing these formats was the same reason in pre-test. The difficulty level of each text was adjusted to a fortunate level for intermediate students. Selection of target words and reading passages in this study were based on two major criteria: a) target words and reading passages had to be appropriate with the subjects' level, b) the target words had to be unfamiliar with the subjects.

Procedure:

Fifty students of Intermediate level of Kavosh Language Institute received a proficiency test as a pretest. This test included: reading, listening and interview which are presented blow.

1) Reading test: every student received a text about two paragraphs. They had three minutes to read the paragraphs and after that they were asked five questions that were related to the text, three true-false items and two multiple choice items.

2) Listening test: students have listened to a very short listening for two minutes. After that they answered to five questions included three true-false items and two multiple choice items that were related to the listening.

3) Interview: this part was a combination of a structured and unstructured interview. The interviewees were asked about their English knowledge background and some other questions.

By the mean thirty four students who could got three, were accepted in the pretest and twenty of them were selected randomly for the investigation. The twenty students were divided in to two groups of ten, one as experimental group and the other as control group.

1) Experimental group: students in this group received three texts with fifteen new vocabularies during three sessions. Every session participants were going to receive a text with five new words, they had Fifteen minutes to read the text and guess the meaning of each word which was written in bold form.

If they had any question the teacher answered them softly. At the end of reading they receive the meaning of new words and compare the correct meaning with those they guessed. The next session they were asked the vocabularies of the previous session. This procedure was repeated during three sessions. In the fourth session they received a test about the fifteen new vocabularies. This test included twenty, both subjective and objective items such as: five blanks, five matching, three opposites, four definitions and three multiple choice questions.

2) Control group: the second group got the same words individually not in the text. They had fifteen minutes every session to memorize the new words and the next session they had been asked the words of previous session before they receive new vocabularies. After three sessions they took the same examination which the experimental group had taken.

In order to test the maintenance of the new vocabularies in learners' long term memory, after one month another test in form of interview was held. The questions of the interview were the same in both control and experimental group.

3. Results

After the treatment, the next step was to determine if any change occurred in the performance of the experimental group who received instruction and training in textual guessing strategy. The results of the performances of the two groups on vocabulary are illustrated in Table 1 below.

Table 1. Performances of groups on vocabulary learning

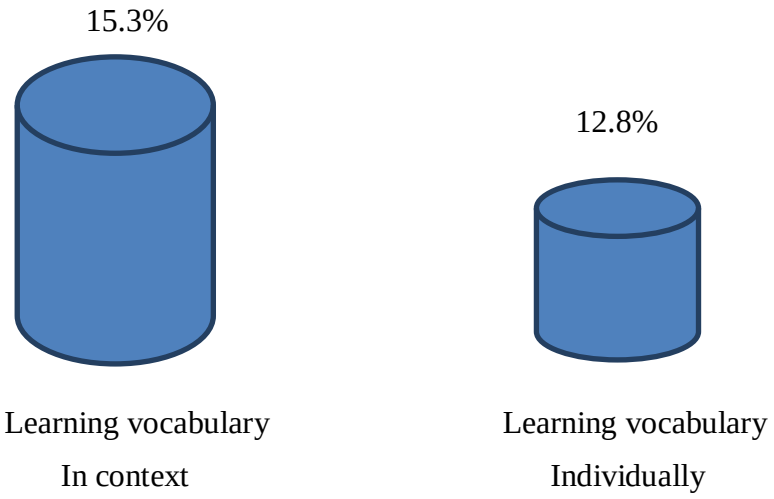
Method	N	Mean	Deviation	Mean
Contextual	10	15.3000	2.62679	.83066
Non-context	10	12.8000	2.61619	.82731

Table 1 shows that the mean for the experimental group (i.e., contextual group) is 15.30 and the mean for the control group (i.e., the non-context group) is 12.80. This means that the amount of learning vocabulary in experimental group is more than control group. Now we are going to know whether the result is accidental or meaningful.

Table 2. Performances of groups on vocabulary learning

Equality of Variances			**t-test for Equality of Means**				
						95% Confidence Interval of the differences	
		Sig(2-tailed)			Mean	std. Error	
	F	Sig	t	df	Deference	Difference	Lower Upper
- Equal							
Variances (asu)	0.23	882.2.132	18	.047	2.50000	1.17237	.03695 4.96305
Equal variance							
Not assumed		2.132	18.000	.047	2.50000	1.17237	.03695 4.96305

The result of independent sample t-test at the posttest stage revealed that the probability value of t-test, with an equality of variances assumption is lower than 0.05 (0.04700). So this result shows that there is a meaningful difference between the amount of experimental group learning and the control group.



Reliability Statistics

Cronbach's Alpha	N of items
0.723	20

The results of the Cronbach's Alpha revealed that the amount of Alpha is more than 0.70, so we can say the test was appropriate for testing the amount of students' vocabulary learning and questions had high correlation together.

4. Conclusion

The findings indicate that contextual guessing strategy helps participants, who were exposed to instructional intervention to this strategy, to obtain a footing in the process of acquiring new words and learn more and also about their meanings compared to the participants without benefit of such an instructional method. The results of the test indicated that learning that occurred through this strategy was effective and efficient. From the results of the test, it was revealed that applying the instructional strategy to the context group was more effectual in comparison to the non-context group (mean $_{context}$=15.3000 >mean $_{non\text{-}context}$ =12.800). This difference implies that the semantic representations created by contextual clues were more durable. This durability could show that the semantic accounts were easier to access than those created without the aid of contextual clues.

Another important finding in this study was that, when it has been clearly taught how to use contextual clues, context (experimental) participants could competently infer the words meanings from written contexts. So those with poor context, in the process of their new word learning may require considerable reinforcement.

There are a number of possible explanations for the greater efficacy of the contextual instruction over direct isolated vocabulary instruction in the present experiment. The first is that seeing the word in a written context can provide more syntactic, semantic and pragmatic information in creating a well-specified semantic representation. At the second stage, the incorporation of a newly acquired word into the learners' short term memory takes place. The other justification would be that the control group was more interactive and the context (experimental) group participants were more engaged with the material, thereby culminating

in better learning compared to the non-context method which was more didactic. Third possibility is that the information about word meaning was presented in a more accessible format out of the context group in comparison with the other group.

REFERENCES

Cunningham S, Moor P (2005). New Cutting Edge: Intermediate Student Book. Longman.

Hornby AS (2009). Oxford Advanced Learner's Dictionary. Oxford. Oxford University Press.

McCarthy MJ (1984). A New Look at Vocabulary in EFL. Journal of Applied Linguistics, 5: 12-22.

Nagy W, Herman P, Anderson R (1985). LearningWords from Context. Reading Research Quarterly, 20, 233-253.

Wiemer-Hastings P, Graesser A, Wiemer-Hastings K (1998). Inferring the meaning of verbs from context. Proceedings of the 20th Annual Conference of the Cognitive Science Society, 1142–1147.

Seibert LC (1927). An Experiment in Learning French Vocabulary. Journal of Educational Psychology, 18: 294-309.

Webb S (2008). The Effect of Context on Incidental Vocabulary Learning. Journal of Reading in a Foreign Language, 20, 2.