The impact of structure on word meaning and fill-in-the-blank tests procedures on short-term and long-term retention of vocabulary items

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Abstract

The purpose of research described in the current study to investigate the impact of structure knowing on two types of test, i.e. word-meaning test and fill-in-the-blank test, their correlation and procedures on both short-term and long-term retention of vocabulary items. The importance of the present study, to test the condition that learners are not allowed to use guess strategy or randomly answer the tests and they should give reason semantically for their answer, otherwise their answer, even is correct, is not scored. The population for subject recruitment was all undergraduate students from second semester at large university in Iran (both male and female) that study English as a compulsory paper. In Iran, English is taught as a foreign language.

Keywords: Vocabulary acquisition, retention, word meaning, structure impact.

1. Introduction

Nowadays, it is widely accepted that vocabulary teaching should be part of the syllabus and taught on a well-planned and regular basis but there is still remains an enormous amount of research to be done in the area, and Paribakht & Weche argued that it is still far from clear how learners acquire (as cited in Browne,2003,p.1), which due to the controversial problem to be arisen along types of tests to score the vocabulary knowledge, their correlation and their procedures on short-term and long-term retention of vocabulary items.
The vocabulary assistance during reading as a first strategy and vocabulary assistance plus structure assistance as a second strategy, are applied in the current study to test if there is any significant impact of structure knowing to answer word-meaning and fill-in-the-blank tests of vocabulary items in the condition that the learners are not allowed to use guess strategy or randomly answer the tests.

It should be mentioned that Firstly, before the current study, the students were taught to practice their lessons productively and should not answer the questions without a reason semantically. In fact, such strategy was applied for them to avoid guess and randomly to answer the questions. Secondly, in word meaning test and fill-in-the-blank test, as the core meaning sense of words were in the text, as Carter argued (as cited in Schmitt, 2000), were suggested to be as answer.

2. Review of Literature

Vocabulary learning is seen as an integral area of language teaching by linguistics researchers. Words are the basic building blocks of language, the units of meaning from which larger structures such as sentence, paragraph and whole text are formed as argued by Read (2000). (as cited in Giridharan & Conlan).

Schmitt and Nation argued that Vocabulary acquisition is indeed a very complex issue (as cited in Fuente, 2006, p.26) and it cannot be assumed that acquisition of a word’s basic meaning will imply acquisition of formal aspects of words.

Wilkins (1972) said “Linguists have had remarkably little to say about the vocabulary and one can find few studies which could be of any practical interests for language teachers, later Meara (1982) mentioned that vocabulary had received short shift from applied linguistics. Ellis (1995) expressed the view that the situation had not changed significantly (as cited in Hai – peng & Li-jing, 2007, p.55).
3. Methodology

3.1 Participants

The population for subject recruitment was all undergraduate students from second semester at a large University in Iran in academic year 2008-2009, that were volunteered to participate in this study. The participants were 64 (both male and female) that were told this study would not affect the final results of their course. Randomly they were divided into two groups that were same number of member. The first group is taught through word-meaning strategy (here, it is called as a word-meaning group) and the second group is taught through structure plus word-meaning strategy (here, it is called as structure-using group).

3.2 Instrumentation

The following instruments were used in the current study:

a) Questionnaire elicited information regarding demographic profile of the respondents (e.g. age, sex etc.),

b) Materials which are prepared for the treatment phase,

c) Materials which are developed as pre-test and post-test that related to materials of treatment and to test learners’ performance on vocabulary retention,

d) Proficiency test in order to homogenize recruitment of the population of learners regarding their English knowledge.

3.3 Procedure

3.3.1 Questionnaire

The questionnaires were distributed two weeks before the treatment in order to elicit information regarding demographic profile of the respondents. The students completed answering the questionnaires in the class and returned the forms to the lecture. The needed details regarding questionnaire, were explained by the lecture.
3.3.2 Proficiency Test

Michigan Test of English language proficiency was used to determine the level of the students’ English proficiency one week before the treatment. The mentioned proficiency test was studied in pilot study to find out its reliability that it was estimated 6.

3.3.3 Pre-testing

Sixty printed words on single paper were given to 90 students and the students were asked to write the meaning of any word in Persian as L1 (as mother tongue) in that paper if they know, and then returned the paper to the lecture. 15 out of 60 words that were completely unknown to the students were chosen. These fifteen words include nouns, verbs, adjectives and adverbs and they again reprint on other particular paper.

Regarding fifteen chosen words, fifteen unseen sentences to the students were developed that in each of them, one lexical item was lost, which should be completed with one of unknown vocabularies that in fact it would be fill-in-the-blank test. These fifteen sentences were printed on single paper that includes meaning of all English words in L1 in the bottom of page (except 15 unknown words) and the structure of all fifteen sentences was so easy to be understand to the students.

The students whom were asked to participate in the pilot study in order to choose 15 out of 60 vocabularies, to estimate reliability of word meaning and fill-in-the-blank tests, were the same academic year, university and grouping majors as the experimental group. The order administration of pre-test was firstly the word-meaning test and then fill-in-the-blank test.

Before the students, received any instruction, the word meaning test and fill-in-the-blank test in the aforementioned order were took by the students. In word meaning test, the students were asked to write the meaning of English words in L1 and after collecting the test papers, the fill-in-the-blank test papers were distributed. For this test, the students were asked to complete any one of the fifteen sentences with one of fifteen given words and also they were asked to write the meaning of the sentence in L1 after
completion to show that they do not use guess strategy and randomly to answer the questions.

3.3.4 Treatment

In the current study, immediately after pre-test, the printed text on single paper that includes those fifteen unknown words was given to the students. The first group, word-meaning group, is taught through Word-meaning strategy. However, the all words are included in text (except, 15 un-known words) were so easy to be understood semantically, their meanings were re-told with the focus on the meaning of 15 un-known words. Enough time and needed help was done that the students understand all the text well. The second group, structure-using group, firstly, it was taught the structure of the text with the focus on those fifteen words. Secondly, the meanings of words were told to the students for structure-using group .In both word-meaning step and strucuter-step, the focus was on fifteen un-known words. Same as word-meaning group, enough time and needed help to word meaning understanding was done. Enough time was given to practice text and if the students have any question to ask.

3.3.5 Post-testing (immediate and delayed tests)

In post-testing the same tests in pre-testing and in the same order were administered, but such administration occurred in two steps. The first step, immediately after finishing treatment (as an immediate post test) and the second step was two weeks later (as a delayed post test).The students were not aware about pre-testing and post-testing.

4. Data analysis

4.1 Scoring procedure

In the word-meaning test, each of correct answer is scored as one point and in fill-in-the-blank test, each correct answer that has the meaning of the sentence in L1, is scored as one point, otherwise even the guess or random correct answers were not accepted, as was told to the student before the beginning the tests.
4.2 Data Analysis procedure

In this study, analysis of obtained data was performed using the SPSS software version 16, T-test was used to test the research through the vocabulary gain score of the sample.

5. Results and findings

Table one displays Mean, Std. Deviation and Std. Error Mean of pre-testing and post-testing (immediate and delayed post tests) of both word-meaning and fill-in-the-blank tests for the two groups i.e. word-meaning group and structure-using group.

<table>
<thead>
<tr>
<th>teaching strategies</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretest vocabulary meaning only</td>
<td>32</td>
<td>0.0000</td>
<td>0.0000^a</td>
<td>0.0000</td>
</tr>
<tr>
<td>meaning+structure</td>
<td>32</td>
<td>0.0000</td>
<td>0.0000^a</td>
<td>0.0000</td>
</tr>
<tr>
<td>pretest fill-in-the-blank meaning only</td>
<td>32</td>
<td>0.0000</td>
<td>0.0000^a</td>
<td>0.0000</td>
</tr>
<tr>
<td>meaning+structure</td>
<td>32</td>
<td>0.0000</td>
<td>0.0000^a</td>
<td>0.0000</td>
</tr>
<tr>
<td>Immediate posttest vocabulary meaning only</td>
<td>32</td>
<td>5.8750</td>
<td>2.48544</td>
<td>.43937</td>
</tr>
<tr>
<td>meaning+structure</td>
<td>32</td>
<td>5.6250</td>
<td>2.74450</td>
<td>.48516</td>
</tr>
<tr>
<td>Immediate posttest fill-in-the-blank meaning only</td>
<td>32</td>
<td>1.5938</td>
<td>1.75719</td>
<td>.31063</td>
</tr>
<tr>
<td>meaning+structure</td>
<td>32</td>
<td>1.2812</td>
<td>1.92160</td>
<td>.33969</td>
</tr>
<tr>
<td>Delayed posttest vocabulary meaning only</td>
<td>32</td>
<td>2.0625</td>
<td>1.60518</td>
<td>.28376</td>
</tr>
<tr>
<td>meaning+structure</td>
<td>32</td>
<td>1.7188</td>
<td>2.17366</td>
<td>.38425</td>
</tr>
<tr>
<td>Delayed posttest fill-in-the-blank meaning only</td>
<td>32</td>
<td>1.2812</td>
<td>1.65070</td>
<td>.29180</td>
</tr>
<tr>
<td>meaning+structure</td>
<td>32</td>
<td>1.04727</td>
<td>1.04727</td>
<td>.18513</td>
</tr>
</tbody>
</table>

a. t cannot be computed because the standard deviations of both groups are 0.
Table two displays Levene’s test and T-test which includes some results regarding the existing data.

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Immediate posttest vocabulary meaning</td>
<td>.383</td>
<td>.538</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.382</td>
<td>61.400</td>
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<tr>
<td>Immediate posttest fill-in-the-blank</td>
<td>.000</td>
<td>.984</td>
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<tr>
<td>Equal variances assumed</td>
<td>.679</td>
<td>61.511</td>
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<td>Equal variances not assumed</td>
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<td>.543</td>
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<td>Delayed posttest vocabulary meaning</td>
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<td>59.061</td>
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<tr>
<td>Equal variances assumed</td>
<td>.720</td>
<td>57.061</td>
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<tr>
<td>Equal variances not assumed</td>
<td>5.225</td>
<td>.026</td>
</tr>
<tr>
<td>Delayed posttest fill-in-the-blank</td>
<td>2.261</td>
<td>52.476</td>
</tr>
</tbody>
</table>

6. Discussion and conclusion

It should be mentioned that Firstly, before the current study, the students were taught to practice their lessons productively and should not answer the questions without a reason semantically. In fact, such strategy was applied for them to avoid guess and randomly to answer the questions. Secondly, in word meaning test and fill-in-the-blank
test, as the core meaning sense of words were in the text, as Carter argued (as cited in Schmitt, 2000), were suggested to be as answer.

The analysis of data indicates that there is not significant impact because of structure knowing and practicing for the two tests procedures on short-term and long-term of retention of vocabulary items between two groups. Such result may be resulted from different factors, that here there are listed probable main factors to due such results.

a. 71.9 percent of the learners are interesting in learning vocabulary and only 12 percent of them are interesting in learning structure and 65.6 percent hate learning structure but 6.2 percent only hate to learn vocabulary regarding respondents’ information that has done through questionnaire. Motivation can play successful factor in learning.

b. The focus on text understanding can due to focus on word meaning rather than focus on structure knowing and practicing. Such reason can cause to emphasize the importance of word meaning rather than structure.

c. In testing, the reality of type of test can increase the learners’ attention to some aspect of knowledge more than the other, aspects. Here, in word – meaning test, the learners try to focus on meaning aspect and in fill-in-the-blank test, because the learners were asked to give reason semantically for their answer, they try to focus on meaning aspect of test rather than structure.

d. The background and dominate approach of the learners can play main role in learning. Meaning learning aspect of vocabulary is more dominate than structure learning aspect as language learning.

e. Here, the nature of structure, may affect this type of procedure of teaching and testing that dues such results, or the nature of word-meaning may affect this type of procedure of teaching and testing that dues such results.

In such situation, there is no positive support for structure impact in the two type tests. The following results can be concluded in this discussion:

A) Word meaning knowing only, cannot help the students to answer the fill-in-the-blank test and some other knowledge is essential to be applied which are dominate to answer
fill-in-the-blank test. Learning a word in isolation does not enable us to use it adequately as words might need other particular words to accompany them (Suberviola & Mendez, 2002, p.235). And as it was shown in Table one, we can see there is significant difference between word-meaning test and fill-in-the-blank test.

B) Memorization of meaning of vocabularies could not increase the results when the base is meaningful learning,

C) In meaningful learning to answer fill-in-the-blank test, it is necessary to learn the essential meaning of words and guess cannot be successful and meaningful technique to answer; in other words, it should avoid that guess would not be real and meaningful learning and also in testing, such factor should be applied to evaluate and score the answers of the learners more clearly to show real knowledge of vocabulary of the learners.

The current study suggests that the type of pedagogical approach of the L2 vocabularies learn may have an impact on retention of new L2 words. The findings clearly demonstrates some results that can be applied in the preparation of teacher training programs, curriculum development, material preparation, syllabus design and the importance of type of the test which is given to the learners in order to score their knowledge of vocabulary as achievement test. If it will be comparison among the learners’ aspects of vocabulary size, depth of processing and degree of organization with their pre- and post levels, the conclusion appears to be well supported.

It should be high correlation as much as possible along techniques and person’s knowledge of vocabulary in teaching and testing of vocabulary that hereby the investigator aims to test if there is any significant impact between two groups because of structure, that the results show there is no positive support for structure.

Further research is needed to better determine the strength of the association among other strategies regarding such study. A future agenda for vocabulary learning researchers should specifically and thoroughly address to the methods and techniques to be applied to teach and assess the vocabulary knowledge better and help the learners that better retention will take place.
Implications for vocabulary learning from this study is that the type of strategy of vocabulary teaching, that the teacher apply in the class, should effect the results of the test which is applied in order to test some particular aspects of vocabulary knowledge of the learners; in other words, It should be correlation of material knowledge of vocabulary and type of test; otherwise it is difficult to claim that bad obtained results, is because of type of strategy of teaching in the class or type of test.

Along with recycling and review techniques to improve recognition and prediction skills, reassessing of learning must be done regularly with frequent individual feedback to maximize acquisition. Better analysis and activation are required to improve learners’ understanding of words. The good types of tests should give good quantity and quality of vocabulary knowledge of the learners.

Although this study, clearly contributes to our understanding of impact of word-meaning and structure plus word-meaning strategies on word-meaning and fill-in-the blank tests procedures on short-term and long-term retention of vocabulary but there are limitations to consider. Firstly, the focus of the study was on testing for statistical significance. Future research should consider mixed design or studies for that examine qualitative aspects of the topic. Secondly, the frequency of the vocabulary is another area. Several of the limitations to this study are ones common in the literature, the needs for a large n-size; need to conduct similar experiments with different population and proficiency levels and so on.

References


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