THE EFFECT OF TEXT-GENERATION ON
INCIDENTAL VOCABULARY LEARNING IN
IRANIAN EFL LEARNERS

Mojgan Yarahmadi

ABSTRACT

The present study was undertaken to demonstrate the effect of text-generation on incidental vocabulary learning in Iranian EFL learners. To test the null hypothesis (i.e. there is no significant difference between the vocabulary average performance of the group undergone text-generation processing and the group undergone traditional vocabulary learning processes), two intact classes containing 70 sophomore female and male students of English Translation at Arak State University, Iran participated. A Nelson test of English Language Proficiency (test 250 A) was conducted at the beginning of the study to make sure that the two intact classes did belong to the same population. A multiple choice pre-test was administered at this stage to ensure the insignificant difference between the two groups. The students in the control group were advised to read the texts, whereas the subjects in the experimental group were supposed to use text-generation (reordering the texts) technique while reading the texts. It is worth mentioning that, both groups were provided with the texts in which target vocabulary items were highlighted. At the end of twelve-week period of treatment a multiple choice post-test of vocabulary (the same as pre-test) was administered in both experimental and control groups to compare the subjects' vocabulary achievement. Adopting a quasi-experimental design, the null hypothesis was rejected at 0.05 and (even at 0.01) level of significance for 68 degrees of freedom.

Key words: text-generation, incidental vocabulary learning, EFL

INTRODUCTION

No wonder, vocabulary learning is of high importance which both teachers and students agree. It seems that most vocabulary learning is through those activities that do not focus particularly on vocabulary. Additionally, many students come to rely on incidental vocabulary learning, finding intentional studying boring. Therefore, more attention needs to be given to the issue of incidental vocabulary learning and finding some techniques to enhance it. The purpose of this study is to determine whether text-generation
technique (reordering of the texts) is helpful or not.

LITERATURE REVIEW

It would be impossible to learn a language without vocabulary. Carmen et al. (1999) believe that “vocabulary is an essential element in learning a foreign or second language” (p. 11). McCarthy (1991) also claims that “to behave in a natural way in a foreign language learners need a fairly rich vocabulary” (p. 71).

But, vocabulary learning can take place in two general ways: intentional and incidental.

Husltijn, Hollander, and Greidanus (1996) defined incidental learning as “the accidental learning of information without intention of remembering that information” (p. 327). Hatch and Brown (1995) defined intentional learning as being designed, planned for, or intended by teacher or student” and incidental learning as “the type of learning that is the byproduct of doing or learning something else” (p. 368).

As described by Gnoinska (1998) many students consider learning vocabulary a tedious job. They try studying lists of words – spelling, pronunciation, meaning, and synonyms – only to realize a few hours later that their results are hardly satisfactory. They start blaming their poor memory. They say they are discouraged by the number of words in English and the complex usage. Some authors writing about human motivation seem to support such student’s opinions. Teachers also keep looking for ways to make vocabulary learning easier and more pleasant.

There is consensus that the incidental vocabulary learning is an essential component to the explicit teaching of vocabulary. As Schmitt and Carter (2000) puts it, a major reason for this consensus is that the number of words necessary for effective language use is greater than that which can be taught easily.

O’Malley and Chamot (1990) state that” in recent years, proponents of learner-based teaching have emphasized on incidental learning” (p. 46). Nation (1990) also believes that” most vocabulary learning will occur as a result of language activities that do not focus particularly on vocabulary” (p. 192).

But, finding some techniques to enhance incidental vocabulary learning is an urgent need. Considering incidental vocabulary learning as a problem, generation as a problem-solving task is helpful.

As Barron (2000) puts it: “engagement in problem solving requires in-depth exploration of the materials and affords multiple opportunities for students to create rich problem representations through discussion and application of problem solving strategies” (p. 391).
A study by Stahl and Clark (1987) investigating the moderating effect of generative processing on vocabulary learning reported findings which showed that generation enhances the acquisition of vocabulary learning. But how does text-generation (reordering of the texts) effect on incidental vocabulary learning is the focus of this research.

**RESEARCH QUESTION**

In order to account for the purpose of the study, the following research question was proposed:

Does text-generation effect the incidental vocabulary average performance of EFL learners?

**RESEARCH HYPOTHESIS**

According to the mentioned research question the following null hypothesis was formulated:

There is no significant difference between the vocabulary average performance of the group undergone text-generation processing and the group undergone traditional vocabulary learning processes.

**METHOD**

**i. Participants**

The subjects who took part in the study were all at the intermediate level (English Translation sophomores) within the age range of 20 to 24 years old. They were all Iranian and their mother tongue was Persian. Both male and female students participated. They were 70 in number.

**ii. Instrumentation**

Two tests were applied during the research: Initially, before the treatment a general proficiency NELSON test adopted from NELSON ENGLISH LANGUAGE TESTS BOOK 2 INTERMEDIATE 1976, Test 250 A) was administered in order to make sure that the two groups were homogeneous. Afterwards, a multiple-choice test composed of one hundred items, based on the target vocabulary items in the selected texts, was developed by the researcher. It was used as the pre-test and post-test.

**iii. Texts**
The readability of the students' book in reading comprehension course was calculated. 0.5 standard deviation below and above the mean was the range in which twelve different texts were provided.

iv. Exercise Task

The vocabulary items which were supposed to make difficulty for the students in the twelve selected texts were underlined and were presented through scrambled sentences for the experimental group and through ordinary sentences for the control group.

v. Procedure

First, two intact classes were chosen. They were 70 male and female sophomores (second year) of English Translation at Arak State university. To determine their homogeneity, a general proficiency NELSON Test (Book 2 intermediate, Test 250 A) was administered. An F-test followed by a t-test was run to make sure that the two intact classes did belong to the same population at the beginning of the research. The book they were studying in their course was bound to be “Reader’s Choice”. The readability of some of the randomly- chosen passages of the book was estimated. The mean readability was calculated to be 22.04. 0.5 standard deviation below and above the mean was the range in which twelve different texts were provided.

Next step was to highlight some of the vocabulary items of the selected passages. To do this, the researcher and two other colleagues who had the experience of teaching at this level of students agreed upon 110 vocabulary items which were likely to pose difficulty for the learners. This list was given to ten students who were at the same level to see whether they were difficult for them or not. It was found out that 100 out of 110 vocabulary items were difficult. Then, these 100 items were given to twelve other students at the same level (English Translation sophomores). They were asked to write their definitions. The results indicated that these were really difficult for them. So, they were underlined in the passages as the target vocabulary items. Then a test of one hundred multiple-choice items was developed using the target vocabulary items. A pilot study was done to standardize the test. Then, it was used as the Pre-test for both the experimental group and the control group.

The treatment period lasted three months. Class meetings were held once a week, in the morning. Every session, the researcher took 30 minutes at the beginning of the class to introduce the new vocabulary items through one mini-passage. Students in control group were given normal version of the text where sentences were presented in their proper order. The new vocabulary
items were underlined. The students were supposed to read the texts.

Students in the experimental group were presented with pieces of paper, with a different sentence from the passage typed on each piece (e.g. if the text has 14 sentences, there would be 14 pieces of paper. On each of them one sentence of the text had been typed). Here, again the target vocabulary items were underlined. They were told to rearrange the sentences into the sequence that made the maximum sense to them (this is called text generation). At the end, the students were provided with the correct format of the passage.

It is worth mentioning that, both control and experimental groups had more or less equal exposure to the texts.

At the end of the experimental treatment period, all subjects were tested immediately to determine post treatment knowledge of vocabulary. The same test used for the pre-test was used for this purpose.

The whole study lasted 15 weeks. 1 session a week; 12 sessions for the treatment and 3 sessions for these tests.

RESULTS AND DISCUSSION

As it was previously mentioned, two intact groups of students participated in the study. In the first step, a general proficiency NELSON test was administered to both groups.

Table 1 shows that there is no significant difference between the control and experimental groups (The t-observed value was 0.576. This amount of t is much lower than the t-critical value (2.000) at 0.05 and (2.660) at 0.01 level of probability for 68 degrees of freedom). Thus, it can be claimed that the two groups are homogeneous.

<table>
<thead>
<tr>
<th>T-observed</th>
<th>Degrees of freedom</th>
<th>T critical</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>.576</td>
<td>68</td>
<td>2.000</td>
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<td>2.660</td>
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Table 1: t-statistic for Nelson

As indicated in table 2, the t-observed value for the comparison of experimental and control groups on the pre-test was 0.1831. This amount of t is much lower than the critical value (2.000) at .05 and (2.660) at .01 level of probability for 68 degrees of freedom. Hence, it can be claimed that that there is no significant difference between pre-test of the control and experimental groups.
The effect of text-generation on incidental vocabulary learning in Iranian EFL learners

<table>
<thead>
<tr>
<th>T observed</th>
<th>Degrees of Freedom</th>
<th>T critical</th>
<th>Level of significance</th>
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<tbody>
<tr>
<td>.1831</td>
<td>68</td>
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<td>2.660</td>
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Table 2: t-statistic for pre-test

The following is a table for comparing the observed t-value based on the students’ post-test performance.

<table>
<thead>
<tr>
<th>T observed</th>
<th>Degrees of Freedom</th>
<th>T critical</th>
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<td>68</td>
<td>2.000</td>
<td>.05</td>
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<tr>
<td>2.660</td>
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Table 3: t-statistic for post-test

Here, the ‘t-value’ well exceeds ‘t-critical’ values both at 0.05 and 0.01 levels of significance. Thus, the null hypothesis is rejected; the two groups scored differently on the post-test, and the difference was statistically significant.

Conclusions and implications

The quest for finding a technique to enhance incidental way of vocabulary learning was the starting point in conducting the present study. Text-generation was found to be influential.

It is a kind of problem-solving task which enables learners to increase their intellectual potency and awareness of their own cognitive process toward discovery learning. No doubt, the brain retains its own products much better and longer than what is put into it ready-made. Through text-generation, vocabulary escapes from learners’ mind with difficulty. It helps the students to increase their power of creative thinking which is necessary for learning, makes them feel involved in classroom activities, and improves their self-confidence. Moreover, it helps the teacher by creating a relaxed atmosphere to remove the students' anxiety and facilitate learning.

The findings may encourage teachers who still believe in teacher-
centeredness to change their viewpoints in favor of more learner centered approaches. It is in fact, the learner who should play the main role in the process of learning. In other words, the student should no longer be considered as a data collecting machine, rather he is to be regarded as a problem solver and generator. The teacher should stop seeing his own role as a feeder of data: he should, instead, motivate the students to use their own mental capabilities to decipher the materials.

Textbooks may need to be designed in a way which guarantees the maximum rate of generation on the part of the learner. Hence, the syllabus designers can include this technique in language classes and programs.
REFERENCES


