International Journal of Research Studies in Language Learning
2013 July, Volume 2 Number 3, 19-34

Lexical consciousness-raising in the vicinity of target vocabulary

Hadi, Farjami
Semnan University, Iran (zzmhadi@yahoo.com)
Iman, Alizadeh
Semnan University, Iran (iman_alizadeh87@yahoo.com)

ISSN: 2243-7754
Online ISSN: 2243-7762

OPEN ACCESS

Received: 15 August 2012 **Revised**: 9 September 2012 **Accepted**: 11 September 2012
Available Online: 6 October 2012 **DOI**: 10.5861/ijrsll.2012.178

Abstract

This study compared the effectiveness of three techniques for teaching English vocabulary to Persian native speakers: a traditional procedure, the classical cloze procedure, and an innovative procedure, which is dubbed here as vicinity technique, based on incidental learning, noticing and consciousness-raising. To do the comparison, 51 students, registered at a private language institute, were randomly assigned to three groups and were taught 40 vocabulary items in five sessions in the three procedures. To evaluate the vocabulary gain in the three conditions, immediate and delayed post-tests were administered and the obtained data were analyzed using ANOVA. The results revealed that the vicinity technique was more effective than the traditional procedure; both in immediate and delayed evaluations. It was also revealed that, although there was no significant difference between the vicinity technique and the classical cloze technique in short-term, the vicinity technique was more effective than the classical cloze one for long-term retention.

Keywords: classical cloze; traditional method; vicinity technique; vocabulary teaching; incidental learning

Lexical consciousness-raising in the vicinity of target vocabulary

1. Introduction

There are many approaches, methods, and techniques to teach or learn the vocabulary of a foreign language. Sometimes, the instruction is direct, that is, having diagnosed the words learners need to know, teachers explicitly present those words to learners for practice. Another approach called incidental learning helps learners learn vocabulary as a by-product of doing other things such as reading or listening. According to Schmidt (1994) incidental learning is the learning of one stimulus aspect while paying attention to another stimulus aspect, in this case, learning vocabulary when learner's attention is focused on other aspects of the linguistic material. The incidental acquisition of the meaning of unknown words depends on many factors that have been the focus of attention of many researchers. Central to this are factors such as the resources and procedures applied in meaning inference (Nassaji, 2003), the influence of reading task and learner factors (Hulstijn & Laufer, 2001), the effect of dictionary or glossing support (Knight, 1994), or the type of texts (Gardner, 2004). Independent strategy development is a third major approach used for vocabulary development, where learners practice how to guess the meanings of unknown words from context or use dictionaries as vocabulary learning support (Hunt & Beglar 2000, cited in Richards & Renandya, 2002).

Various researchers have differently commented on the role of attention in vocabulary acquisition and sometimes their ideas are pregnant with controversy. For example, while researchers such as Nation (2001) and Schmitt (2002) argue that incidental learning accounts for the vast majority of L1 vocabulary learning, some vocabulary authorities such as Laufer (2001) and Webb (2008) suggest that explicit learning of vocabulary may be responsible for most L2 vocabulary learning. By the same token, Hulstijn (2003) also maintains that intentional or incidental learning requires some attention and noticing. As a contribution to the current debate over efficient vocabulary teaching and learning, and the role of conscious attention, this study attempted to examine the effect of attention-catching potential of a suggested technique, vicinity technique, on the learning of target vocabulary in comparison with two more established vocabulary-teaching techniques.

1.1 Traditional technique

In the traditional technique of teaching words, synonyms, antonyms, or clues are given for target words in the passage. Unlike the two other techniques in the current study, this technique is not based on the manipulation of passage. The technique does not invest in the potential of the text to help learners guess the meaning of the words from the context.

1.2 Classical cloze technique

This technique is a passage-based technique which attempts to teach words by aiming at the target items directly. In this vocabulary teaching technique, attention is drawn to the target words by providing them as options with which students should fill in the blanks in a classical cloze. This technique is akin to explicit teaching of vocabulary. Explicit or direct instruction requires diagnosing the words learners need to know, presenting such words to the learners and elaborating on their word knowledge. Schmitt (2002) lists a number of strategies which can be employed for explicit learning; among them, one can refer to sound spelling correspondences, word parts (prefixes, stems, suffixes), word form analogy, underlying concepts and extensions, collocational patterns, as well as types of associations.

1.3 Vicinity technique

Vicinity effect here refers to the interaction between neighboring known and unknown words in a stream of

words in a text which is established by deleting some of the known ones. The vicinity technique is the deletion of one or more known words in the neighborhood of each target word in the text in order to enhance the vocabulary input and consequently the incidental learning of target words. The technique employs text comprehension as a springboard to teaching vocabulary.

Text comprehension, however, according to Rott and Williams (2003), would not necessarily require the kind of word processing that results in long-term retention. Therefore, if the goal is to make new words learned and retained, a variety of textual enhancement techniques such as adjunct aids (Robinson, 1994), increased word frequency, or provision of glosses could be applied. According to Schmitt (2002), effective learning also requires consciousness-raising of unknown words, for example through glossing, dictionary use or highlighting in the text. In the vicinity technique, producing gaps in the vicinity of target words will raise students' consciousness and, as a result, their attention will be drawn to the gaps. Meanwhile students will peripherally attend to the target words in the vicinity of the gaps. As a result, the technique tries to satisfy the claims in the intentional front by providing gaps in the vicinity of target words and raising learners' consciousness.

On the other hand, it is generally accepted that learners learn most vocabulary items incidentally (Davis, 1989; Fraser, 1999; Rieder, 2002). Researchers such as Hulstijn et al. (1996) and Jacobs et al. (1994) have found techniques such as use of dictionary, guessing from context, and glosses, which fit, more or less, these conditions promote vocabulary gains in incidental vocabulary learning. Zhexi (2009) managed to study the effect of input enhancement and output tasks on vocabulary development while reading, and found a significant effect for both. Textual elaboration, however, appears to have an unclear effect on incidental vocabulary learning. In this regard, Chung (1995) developed five different versions of a reading passage: unmodified baseline, simplified, lexically elaborated, structurally elaborated, and lexically and structurally elaborated. After teaching based on the developed texts, three vocabulary tests were administered involving form, meaning, and delayed meaning recognition. The results showed no significant effects of textual elaboration on reading comprehension or incidental vocabulary learning. In the same vein, Urano (2000) investigated the effects of two different types of input modification, simplification and elaboration on second language comprehension and incidental vocabulary acquisition of Japanese learners. Unlike Chun's findings, he reported that lexical elaboration triggers incidental vocabulary acquisition while simplification does not. The vicinity technique contributes to the incidental learning of vocabulary through embedding the target words near the gaps. As was mentioned, the focus of attention is primarily on the gaps, however, after completing or in some instances for completing the gaps students' attention was peripherally attracted to the unknown words. Here students are encouraged to guess the meaning of the new words, ask the meaning from their partners or look it up in a dictionary.

To put it in a nutshell, this technique aims at reconciling the two fronts in vocabulary teaching, namely incidental and intentional vocabulary learning. It mixes the two methods in the reading comprehension text by attracting learners' attention both focally and peripherally. To do so, the researcher developed a passage containing some target words intended to be taught. The assumption is that because these target words are near the blanks with easily guessable answers, the learners will have the opportunity to deal with target words with more channel capacity. In the process, students answer some comprehension questions but the main goal is to teach some target words, which are in the vicinity of these questions. As the questions are easy, students do not need to pay much attention to them; rather, they will invest mental energy in unknown words nearby. The result of the work will be something similar to a classical cloze but unlike a classical cloze which directly aims at target words, this type of gapped passage draws students' attention to the target words indirectly through some easy words in their vicinity.

Given the trends in recent research, the researcher approached this study with an intuitive sense that teaching words based on the vicinity technique may actually lead to better retention of vocabulary in comparison to teaching words in the classical cloze technique and based on the traditional technique. Considering the above-mentioned purpose, the following questions were formulated:

1. Does producing gaps in the vicinity of target items in passages cause a better retention of target words by students than teaching them in context based on the traditional method?

2. Does producing gaps in the vicinity of target words in passages cause a better retention of those words by students than teaching them directly in classical cloze?

2. Methodology

2.1 Participants and setting

The participants of this study were 51 language male learners at *Pooyan Language Institute*. The researcher chose this institute, because he was familiar with both the learners and the management. The institute is one of the major language institutes in *Semnan*. It has more than 500 language learners at different levels of proficiency. The researcher was an English instructor there for about a year. The participants were all taking Headway courses. 16 of them were taking Headway 1 (Elementary) part C, 19 of them were taking Headway 2, part A (Intermediate), and 16 of them were taking Headway 2 (Intermediate) Part B. Because all of them were being taught by the researcher, after consulting with the management of the institute and after taking a general proficiency test, he decided to divide them randomly in three groups, namely Group A, Group B, and Group C each including 17 subjects.

2.2 Instrumentation

The instruments used in this study included a general test of language proficiency as a pre-test, four immediate and four delayed post-tests and a general test of the target words to be taught. Although students were almost from the same level at the institute and their previous term final marks proved their homogeneity, the researcher preferred to administer a general proficiency test to make sure that they were at the same level. The general proficiency pre-test was a teacher-made vocabulary test. 40 vocabulary items were selected from the students` textbook, based on which a forty-item multiple-choice test was developed. After a pilot study on a small group of respondents, 10 items were discarded and some others were changed. So, thirty items were left for the pre-test. The reliability of this test calculated by Kuder-Richardson reliability coefficient was 0.67.

In addition to the pre-test, another general English test was administered. The purpose of this test was to make sure that students do not know the meaning of the target words the researcher was going to teach during his experiment. The target words in this test were all the words in the passages for experiment. All of these words were given in a list and students were asked to write their meaning either in Persian or in English. (Appendix A). The post-test of the study was in two types namely, immediate and delayed. Each of them consisted of 20 multiple-choice items. The time given for each was 20 minutes and the correct answer to each item received one point. There was no penalty for false responses. The delayed test was given after a week interval.

2.3 Materials

2.3.1 Target Words

In order to implement the study 52 words were selected from four passages to be taught based on the three techniques in the study. These words were given to the students to make sure that they do not know their meanings. After considering the feedback, 40 words were selected for the purpose of the study.

2.3.2 Passages

Students faced the target words in the study in passages of 150 words on the average. These passages, which were about 15 lines, were taken from the book “An English course for university students” by Behroozi, Nematollahi, and Mahmoodi (2006). It was chosen because it was topic centered and its topics were interesting

and appropriate. After choosing the book, four passages which were more appropriate were selected and then from these passages 40 words were selected as the target words of the study.

Three types of passages were utilized:

- Intact passages: These passages were by no means manipulated and were used to teach Group A.
- Classical cloze: These passages, used to teach Group B, were manipulated by the researcher. The process of deletion in these passages was systematic, that is, the words deleted in these passages were only the target words of the study.
- Cloze passages based on Vicinity technique: Like the classical cloze, the process of deletion in these passages was also systematic. The difference of these passages with the classical cloze lies in the words deleted. Unlike the classical cloze where the deleted words were the target words of the study; the cloze passages using vicinity technique kept the target words and had some easy and simple words in the vicinity of the target words missing from the passage. These passages were used for teaching Group C.

2.4 Procedure

1. Pre-test and Post-test Preparation and Administration

The preparation phase of pre-test was explained in section 2.2. The general test was administered to the subjects. The time given was one hour and the correct answer to each item received one point. There was no penalty for false responses. After taking the exam, each subject was rendered a grade based on his performance on the test. Subsequently, 51 students were selected, and randomly assigned to three groups each consisting of 17 subjects. One-way ANOVA was applied to confirm the homogeneity of the groups. The post-tests of the study were based on the passages taught. There were four immediate and four delayed post-tests.

2. Treatment

This study included three different kinds of treatment. They were intact passages, classical cloze and passages based on the vicinity technique. In the following section each type of treatment is explained in detail:

- Treatment Based on the Traditional Technique. In the process of teaching based on the intact passage, first the teacher, who was the researcher, clarified the topic of the passage and provided some background knowledge for the students. Then, he let the students look at the passage, skim it and guess the meaning of unknown words. In this phase the teacher provided no information and didn't help the students. After that, the teacher read the passage for the students and clarified the passage for them by giving some synonyms and antonyms for some words that students did not know, hence the label traditional.
- Treatment Based on the Classical cloze technique (Direct Teaching). The passages used to teach vocabulary based on classical passage technique were the intact passages that were manipulated by deleting the target words. In teaching based on these passage like previous technique first teacher explained the passage and provided some background knowledge for the students. Then he asked students to read the passage and skim it. Finally, he clarified the meaning of the target words and asked them to fill in the blanks with the target words. There were between10 to 12 blanks in each passage. For completing the blanks the number of words to fill in the blanks was one more than the blanks. That is, one was extra. After the students completed the blanks, the teacher provided the correct choice for each slot.
- Treatment based on the Vicinity technique (Indirect Teaching).The process of making classical cloze based on the Vicinity technique was explained before. In class application, like the previous

techniques, the passage was explained and some background knowledge was provided. Then students skimmed the passage. Afterward, students were asked to fill in the blanks in the vicinity of the target words with some easy words. Students could easily fill in the blanks, because they already knew the meaning and grammatical function of the options. After filling in the easy blanks, students faced with some unknown bolded words in the vicinity of the blanks. These words in the vicinity of the blanks were not the questions; however, their unfamiliarity and boldness attracted students' attention and encouraged the students to find out their meaning.

This effect was because of the consciousness raising effect. At first students were asked to find out the meaning of the unknown target words from the context. In the process of inferring the meaning of words from the context, students were challenged to find out the meaning of the words. This process of mental work helped the better retention of the words. Students, at first, tried to infer the meaning form the contextual clues individually. Then, they shared their inferences. Finally, the teacher provided the required help and checked students' inferences to make sure that they had inferred the meaning correctly.

3. Results

In order to find appropriate answers to the research questions of the study, the collected data were analyzed. The collected data in the current study are the students' pre-test, and post-test scores.

3.1 Descriptive statistics for different tests

The descriptive statistics of different tests administered during the study are presented in tables1, 2 and 3.

Table 1

Descriptive statistics of pre-test data

Test	*N*	Minimum	Maximum	Mean	*SD*
Pre-test	51	14.00	28.00	22.96	3.91

Table 2

Immediate post-test descriptive statistics for groups A, B and C

Immediate Post-tests	*N*	Minimum	Maximum	Mean	*SD*
1st Immediate Post-test for group A	17	4.00	7.00	5.75	1.00
2nd Immediate Post-test for group A	17	4.00	6.00	5.65	0.93
3rd Immediate Post-test for group A	17	3.00	7.00	5.35	1.17
4th Immediate Post-test for group A	17	4.00	7.00	5.82	0.95
1st Immediate Post-test for group B	17	7.00	10.00	8.35	0.93
2nd Immediate Post-test for group B	17	6.00	9.00	7.88	0.93
3rd Immediate Post-test for group B	17	7.00	9.00	8.12	0.78
4th Immediate Post-test for group B	17	7.00	9.00	7.82	0.64
1st Immediate Post-test for group C	17	6.00	10.00	8.06	1.14
2nd Immediate Post-test for group C	17	6.00	10.00	7.94	0.97
3rd Immediate Post-test for group C	17	7.00	10.00	8.18	0.88
4th Immediate Post-test for group C	17	6.00	10.00	8.42	1.12

Table 3

Delayed post-tests descriptive statistics for groups A, B and C

Delayed Post-tests	*N*	Minimum	Maximum	Mean	*SD*
1st Delayed Post-test for group A	17	3.00	7.00	4.24	1.03
2nd Delayed Post-test for group A	17	3.00	6.00	4.34	0.93
3rd Delayed Post-test for group A	17	3.00	6.00	4.00	0.94
4th Delayed Post-test for group A	17	2.00	5.00	4.35	1.17
1st Delayed Post-test for group B	17	4.00	8.00	5.76	1.20
2nd Delayed Post-test for group B	17	4.00	8.00	5.65	1.11
3rd Delayed Post-test for group B	17	3.00	7.00	5.47	1.23
4th Delayed Post-test for group B	17	4.00	7.00	5.59	1.23
1st Delayed Post-test for group C	17	5.00	9.00	6.65	1.00
2ndDelayed Post-test for group C	17	6.00	9.00	6.82	1.29
3rd Delayed Post-test for group C	17	5.00	9.00	6.82	1.01
4th Delayed Post-test for group C	17	5.00	8.00	6.71	0.77

3.2 Results of Analysis of the Pre-test

To make sure that the three groups are homogeneous a pre-test was administered and students' scores on this test were used as the data for analysis. For comparing the performance of the three groups ANOVA test was used. The results are depicted in table 4.

Table 4

One-way ANOVA for the pre-test data

	Sum of Squares	*df*	Mean Square	F ratio	F critical
Between Groups	10.157	2	5.08	.323	3.19
Within Groups	753.765	48	15.70		

As the results of the one-way ANOVA show, F ratio (.323) does not exceed the F critical value (3.19) at the .05 level of significance. This means that there was no significant difference among the three groups and the three groups were homogeneous.

3.3 Results of analysis of the immediate post-test

After the treatment, an immediate post-test was administered to see the effect of the treatment on students' recall. In order to see the results of the immediate post-test one-way ANOVA was utilized to see whether the differences among the means obtained by the three groups were significant. The results are presented in Table 5.

Table 5

One-way ANOVA for performance on the immediate post-test

	Sum of Squares	*df*	Mean Square	F ratio	F critical
Between Groups	71.341	2	35.67	189.62	3.19
Within Groups	9.029	48	0.19		

As the results of the one-way ANOVA in table 5shows, F ratio (189.622) exceeds the F critical value (3.19) implying that there was a significant difference among subjects` performance on different techniques of teaching the target vocabulary. A Turkey Test was run to find where this difference was located. The results of the test are presented in Table 6.

Table 6

Turkey test output for participants' performance on the immediate post-test

	(I) group	(J) group	Mean Difference (I-J) Lower Bound	*SE* Upper Bound	Sig. Lower Bound
Turkey HSD	A	B	2.45588(*)	.14876	.000
	A	C	2.55882(*)	.14876	.000
	B	A	2.45588(*)	.14876	.000
	B	C	-.10294	.14876	.769
	C	A	2.55882(*)	.14876	.000
	C	B	.10294	.14876	.769

Table 6 shows that the differences lay between Group A (Traditional technique) and Group B (classical cloze technique), and Group C (vicinity technique). However, there was no significant difference between Group B and Group C.

3.4 Results of the analysis of the delayed post-test

The statistical procedure of one-way ANOVA was utilized to see whether the differences among their means were significant. The results are presented in Table7.

Table 7

One-way ANOVA for performance on the delayed post-test

	Sum of Squares	*df*	Mean Square	F ratio	F critical
Between Groups	53.93	2	26.96	61.78	3.19
Within Groups	20.95	48	0.436		

As the results of the one-way ANOVA in the Table 7 shows, F ratio (61.78) exceeds the F critical value (3.19) implying that there was a significant difference among subjects` performances on different techniques of teaching target vocabulary items. To find where this difference is located, a Turkey Test was employed, the results of which are presented in Table 8.

Table 8

Turkey test results for performance on the delayed post-test

	(I) group	(J) group	Mean Difference (I-J) Lower Bound	*SE* Upper Bound	Sig. Lower Bound
Turkey HSD	B	A	1.38235(*)	.22659	.000
	C	A	2.51471(*)	.22659	.000
	A	B	1.38235(*)	.22659	.000
	C	B	1.13235(*)	.22659	.000
	A	C	2.51471(*)	.22659	.000
	B	C	1.13235(*)	.22659	.000

Note. $p<.05$ *the mean difference is significant at the .05 level.

Table 8 shows that the differences lie between Group A (traditional technique) and Group B (classical cloze technique), and Group C (vicinity technique).

4. Discussion

The results of this study may be somehow surprising to teachers, course designers and material developers who put much faith in providing passages, synonyms, antonyms and definition to target words. Contrary to this idea, the results indicate that vocabulary items that are taught through classical cloze and/or based on the Vicinity technique are by far better learned and remembered. Participants who learned vocabulary using the classical cloze and the vicinity technique could recall more target words even after an interval. Considering both the results of the immediate and delayed post-tests, one can safely claim that students in Group C, whose

teaching was based on the vicinity technique of teaching vocabulary performed far better than the students in Group A, whose teaching was based on the traditional technique. Besides, although the performance of students in Groups B and C on the immediate post-test was not significantly different, in the delayed post-test Group C performed better than Group B. Students in Group B whose teaching was based on the cloze passage performed, both in the immediate and delayed post-tests, performed better than students in the traditional group. Based on the obtained results it can be claimed that the students in Group C performed better than students in the other two groups. In what follows, different reasons for the better or weaker performance of different groups are discussed.

The better performance of Group B in comparison to Group A on the immediate post-test can be due to the fact that students in Group B directly focused on the words in the treatment but students in Group A did not focus on the words in the treatment and only a synonym or antonym of the words was given. Another reason can be the fact that they were not much involved in the text and were not challenged by the target words. As shown on the delayed post-test; students in Group C performed better than students in Group B and Group A, and students in Group B performed better than students in Group A. Like immediate post-test, both Group B and Group C performed better than Group A, but unlike immediate post-test, in delayed post-test students in Group C performed better than those in Group B.

The better performance of students in Group C can be due to both affective and cognitive reasons. Students' learning in Group C was affectively supported. In this group, students, at first, completed some easy blanks successfully, which motivated them to learn better in case of encountering some new words that they noticed indirectly. After filling each blank successfully, students had the impression that they had learned the words and as a result, they were empowered and felt that they could learn the target words successfully, too. Cognitively speaking, students learn better if they move from easy to difficult. In Group C students first encountered some easy words and indirectly experienced some unknown words. This is in line with the notion of scaffolding and zone of proximal development. In this technique students were first cognitively involved with some easy words which they already knew, as a result their attention to the target words was only incidental.

Another reason for the better performance of Group C is the involvement of students with the text and their pair-work to find the meaning of target words. Based on this technique, students first worked on the text to fill in the blanks collectively. After completing the blanks, they faced with some new words which they had attended indirectly. After facing the words, they first challenged their mind and used the text to find the meaning of the target words. Unlike Classical cloze technique in which meanings of target words were given directly by the teacher at the beginning of treatment, in this technique the teacher let the students get involved in the text, and challenge their mind to understand the meaning of the words. Of the two techniques, that is, teaching in the classical cloze and the Vicinity technique, the latter was more effective in eliciting vocabulary gain and retention because of mental processing of words. Besides, in the Vicinity technique more involvement was triggered by the decision-making process in inferring word meaning.

The theoretical support for the teaching technique for Group C comes from different fronts. As it was mentioned, one of the ways for fostering vocabulary retention is learning vocabulary in context. Sternberg (1987) stresses that "most vocabulary is learned from context". Learning vocabulary in context is supported by some well-grounded theories such as schemata theory and Gestalts principles of closure and proximity. So one can claim that one of the means for representing a supporting theoretical document for why the Vicinity technique is successful is using context. One of the facets, which this technique relies on, is incidental learning. Advocates of incidental vocabulary acquisition define it as the "*learning of vocabulary as the by-product of any activity not explicitly geared to vocabulary learning*" and is contrasted with intentional vocabulary learning, defined as "*Any activity geared at committing lexical information to memory*" (Hulstijn 2001). In the process of learning vocabulary students' attention is not drawn directly to the target words, rather their attention is drawn indirectly to the target words by producing gaps in the vicinity of them.

The next theme that provides theoretical support for the success of this technique is the notion of

consciousness rising. In this technique consciousness rising is achieved through producing gaps in the vicinity of target words. These gaps attract students' attention to themselves. Meanwhile students may notice some new words located in the vicinity of these target words. As a result, they unintentionally face these new words and are challenged to use the context to discover the meanings of words.

Still, there are two other theoretical bases which support the Vicinity technique, namely Krashen's i+1 hypothesis (Krashen, 1988) and Vygotsky's zone of proximal development (Vygotsky, 1894). According to Krashen's input hypothesis, the learner progresses along the 'natural order' when he/she receives second language 'input' that is one step beyond his/her current stage of linguistic competence. He also argues that while some aspects of a language may be learned by conscious, structured, deliberate learning, most of it is acquired incidentally, in authentic situations by focusing on the message, rather than the words or structures it contains. Optimal acquisition will occur if the learner is exposed to frequent input, just above their current level, but with sufficient cues to be comprehensible (Krashen, 1988). In the vicinity experiment, the researcher first created some easy blanks for words which students already knew their meanings and in the vicinity of more challenging target words. Although one can say that these target words were beyond students' level of competence, the research results showed that contextual clues and the support of teacher helped reduce the difficulty load of the target words.

The last but not the least standpoint for the vicinity technique is Vygotsky's ZPD which is the difference between what a learner can do without help and what he or she can do with help. In this technique, first students are allowed to do whatsoever they can do on their own and by seeking help from the text. Afterwards, teacher helps them and provides feedback to help students avoid making false inferences and find the correct meaning of the target words.

The Classical cloze technique of teaching which is done mainly explicitly and in the framework of classical cloze is less successful than the Vicinity technique. Explicit learning seems to be associated with the presence of concurrent consciousness or awareness of the structures or rules being learned. As discussed, in the classical cloze technique students directly face the words and their attention is explicitly drawn to the target words. In this technique, there is no need to infer the meaning of the words from the passage, because their meaning is directly given. As the results showed, on the immediate post-test there was no significant difference between the vicinity technique and the Classical cloze technique, but, the difference on the delayed post-test. This difference must have to do with the implicit or incidental demand in the vicinity technique and the explicit demand in the classical cloze technique.

The difference between implicit and explicit learning has been discussed from different perspectives. The systems theory, for example, stipulates implicit and explicit knowledge is stored in separate memory systems (Squire & Knowlton 1998). The processing theory (Roediger 1990), supposes different processes are used to store and retrieve information. Moreover, it's been discussed that implicit knowledge persists over a longer time period, while explicit knowledge is forgotten quickly (Tulving et al. 1982). The evidence for longer residence of implicit or incidental knowledge is the fact that amnesiacs lose their ability to retain explicit knowledge, although their implicit memory remains intact (Warrington & Weiskrantz, 1970). So, one of the reasons for the better performance of the students was the kind of learning triggered by vicinity technique. This kind of learning is more persistent than the learning gained by the classical cloze technique.

Another reason is that in the classical cloze technique students do not take advantage of the contextual clues in finding the meanings and do not challenge their mind. Besides, unlike the vicinity technique which takes into account the positive points related to Krashen's i+1 hypothesis or Vygotsky's ZPD, classical cloze technique does not resort to these resources.

The weak performance of students whose teaching was based on traditional technique may be due to the fact that in this technique neither explicit learning nor implicit learning is duly applied. In this technique, the teacher reads the text and gives a synonym or antonym for the target words. So students neither infer the meaning of

unknown words nor are the meanings given directly. Here, unlike the other two techniques, students' consciousness is not raised and no implicit learning occurs, so their attention is not drawn directly or indirectly to the target words. As a result student will forget them quickly.

5. Conclusion

Considering the problems and lack of effective techniques in vocabulary learning, this study attempted to introduce a new technique in teaching vocabulary. Having this aim in mind, the researcher compared three techniques of teaching vocabulary:

- Teaching words in context based on traditional technique
- Teaching words in the classical cloze
- Teaching words through the Vicinity technique which is based on the consciousness raising and incidental learning.

The main aim of the study was to explore the effectiveness of the vicinity technique.

Based on the obtained results from the post-tests the first two questions were answered. Regarding the first question: Does producing gaps in the vicinity of target items in passages cause a better retention of them in students than teaching them in context? The results of both immediate and delayed post-tests showed a positive answer. Regarding the second question: Does producing gaps in the vicinity of target words in passages cause a better retention of words in students than teaching them directly in classical cloze? The result of immediate post-test showed no significance difference, but the delayed post-test showed a positive answer. As a result, we can conclude that the Vicinity technique was more effective than the classical cloze technique in long term retention.

Form the findings of this study it can be concluded that learning vocabulary occurs best while students are wholly involved in the passage, their consciousness is raised and they their attention is indirectly directed to the target words. The study shows that students' vocabulary learning can be enhanced by manipulating passages and creating gaps in the vicinity of target words. Producing gaps raises students' awareness; as a result, they pay attention to the gaps and unintentionally attend the surrounding target words.

In the first technique, the traditional one, no consciousness raising or incidental learning occurred. Although it is undeniable that reading passages and teaching vocabularies in the context can result in the process of vocabulary learning, there is still concern that learners' passage comprehension and not focusing on target words may go against the kind of word processing, which is an indispensable element in vocabulary learning.

In the second technique, teaching words in classical cloze, words were attended directly. In this technique, as learners are engaged in reading, their attention to new words is drawn by separating them from the passage and soliciting the students to fill in the blanks with them. Teaching vocabulary through this method enriches students' knowledge of the target words. Moreover, knowing the meaning of target words can facilitate students' burden of dictionary consultation and prevent students from making wrong inferences. Despite the advantages of this technique, it seems students are deprived of the opportunities to develop their inferential skills and incidental learning when the meaning is given directly. In order to solve this problem the third technique is introduced.

In the third technique, teaching based on consciousness raising and incidental learning, words were attended indirectly and students were asked to infer the meaning of the words from the passage. The study suggests that word processing via inferring the meaning facilitate students vocabulary acquisition more than what the classical cloze technique does. In other words, giving students word definition directly may deprive them of the opportunities to have deep processing of the words which leads to forgetting target words in long term.

Regarding the findings of the study, the researcher suggests vicinity technique of teaching vocabulary as an

effective way in teaching vocabulary. The findings of the study have some implications for language teachers and material developers.

5.1 Implications

5.1.1 Pedagogical implication.

No matter what kind of passage manipulation teachers employ, one thing to bear in mind is that students should not abandon their inferring ability to learn words incidentally while they are engaged in the context. Based on the vicinity technique teachers should always encourage students to infer the word meaning from context before they give the meanings of the words or the students consult the meanings of the new words in a dictionary. Teachers can implement the third technique of teaching vocabulary in the class to elicit students mental processing of the words in class and trigger deep mental processes in the students. In this technique correct feedback can be presented immediately after learners finish the fill in the blanks task and make their inferences. If done so, the influence of wrong inference can be minimized; at the same time, learners can exert more mental efforts on the new words, from which their vocabulary learning can be consolidated.

5.1.2 Implications for material developers.

Currently, the whole material available on the market is either in the form of passages or occasionally in the form of classical cloze which are generally used for testing and not teaching. Based on the Vicinity technique introduced in this study material developers and course designers can develop texts which trigger both students consciousness and incidental learning which in turn yields more effective learning and acquisition of words.

5.2 Limitations of the study

Although much care was taken in carrying out the study, there were some limitations which do not seem to have a significant effect on the result of the study. One of the limitations of the study relates to the sex of participants. All the students in the study were male. Another limitation of the study can be the age of the participants. They were all between 14 to 16 years old.

5.3 Future research

Other aspects of the vocabulary learning can be employed to corroborate the findings of the present study, such as a productive task of vocabulary, various locations of the blanks, and deleting the auxiliary part of verbs in continuous, and perfect tenses and passive voices. Besides, the effect of the present study on both males and females can be investigated.

6. Reference

Behroozi, P., Nematollahi, M., & Mahmoodi, N. (2006). *An English course for university students*. Tehran: Rahnama Publications.

Chung, H. (1995). *Effects of elaborative modification on second language reading comprehension and incidental vocabulary learning*. Unpublished Masteral thesis, University of Hawaii at Manoa, USA.

Davis, J. (1989). Facilitating effects of marginal glosses on foreign language reading. *Modern Language Journal, 73*, 41-48. http://dx.doi.org/10.1111/j.1540-4781.1989.tb05308.x

Fraser, C. A. (1999). Lexical processing strategy use and vocabulary learning through reading. *Studies in Second Language Acquisition, 21,* 225-241. http://dx.doi.org/10.1017/S0272263199002041

Gardner, D. (2004). Vocabulary input through extensive reading: A comparison of words found in children's narrative and expository material. *Applied Linguistics, 25*, 1-37. http://dx.doi.org/10.1093/applin/25.1.1

Hulstijn, J. H. (2003). Incidental and intentional learning. In C. Doughty & M. H. Long (Eds.), *Handbook of second language research* (pp. 349-381). London: Blackwell.

http://dx.doi.org/10.1002/9780470756492.ch12

Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. *Language Learning, 51*, 539-558. http://dx.doi.org/10.1111/0023-8333.00164

Hulstijn, J. H., Hollander, M., & Greidanus, T. (1996). Incidental vocabulary learning by advanced foreign language students: The influence of marginal glosses, dictionary use, and reoccurrence of unknown words. *The Modern Language Journal, 80*(3), 327-339. http://dx.doi.org/10.1111/j.1540-4781.1996.tb01614.x

Hunt, A., & Belgar, D. (2005). A framework for developing EFL reading vocabulary. *Reading in a Foreign Language, 17*, 23-59.

Jacobs, G. M., Dufon, P., & Hong, F. C. (1994). L1 and L2 vocabulary glosses in L2 reading passages: Their effectiveness for increasing comprehension and vocabulary knowledge. *Journal of Research in Reading, 17*, 19-28. http://dx.doi.org/10.1111/j.1467-9817.1994.tb00049.x

Knight, S. (1994). Dictionary use while reading: the effects on comprehension and vocabulary acquisition for students of different verbal abilities. *The Modern Language Journal, 78*, 285-299. http://dx.doi.org/10.1111/j.1540-4781.1994.tb02043.x

Krashen, Stephen D. (1988). *Second language acquisition and second language learning*. London: Prentice-Hall International.

Laufer, B. (2001). Reading, word-focused activities and incidental vocabulary acquisition in a second language. *Prospect, 16*, 44–54

Laufer, B., & Hulstijn, J. (2001). Incidental vocabulary acquisition in a second language: the construct of task induced involvement. *Applied Linguistics, 22*, 1-26. http://dx.doi.org/10.1093/applin/22.1.1

Nassaji, H. (2003). L2 vocabulary learning from context: Strategies, knowledge sources, and their relationship with success in L2 lexical inferencing. *TESOL Quarterly, 37*, 645-670. http://dx.doi.org/10.2307/3588216

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.

Richards, J. C., & Renandya, W. A. (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge: Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511667190

Rieder, A. (2002). A cognitive view of incidental vocabulary acquisition: From text meaning to word meaning? *Views*, *11*(1-2), 53-71.

Robinson, D. H. (1994). Textbook selection: Watch out for 'inconsiderate' texts. In K. Prichard & M. Sawyer (Eds.), *Handbook of college teaching* (pp. 415-422). Westport, CN: Greenwood.

Roediger, H. L. (1990). Implicit memory: Retention without remembering. *American Psychologist, 45*(9), 1043-1056. http://dx.doi.org/10.1037/0003-066X.45.9.1043

Rott, S., & Williams, J. (2003). Making form-meaning connections while reading: A qualitative analysis of word processing. *Reading in a Foreign Language, 15*, 45-75.

Schmidt, R. (1994). Implicit learning and the cognitive unconscious of artificial grammars and SLA. In N. Ellis (Ed.), *Implicit and explicit learning of languages* (pp. 165-209). London: Academic Press.

Schmitt, N. (2002). *Vocabulary in language teaching*. Cambridge: Cambridge University Press.

Squire, L.R. & Alvarez, P. (1998). Retrograde amnesia and memory consolidation: A neurobiological perspective. In L. R. Squire & S. M. Kosslyn (Eds.), *Findings and current opinion in cognitive neuroscience* (pp. 75-83). Cambridge, Massachusetts: MIT Press.

Sternberg, R. J. (1987). Most vocabulary is learned from context. In M. G. McKeown & M. E. Curtis (Ed.), *The nature of vocabulary acquisition* (pp. 89-105). Hillsdale, NJ: Lawrence Erlbaum.

Tulving, E., Schacter, D. L., & Stark, H. A. (1982) Priming effects in word-fragment completion are independent of recognition memory. *Journal of experimental psychology: Learning, memory, and cognition, 8,* 336-342. http://dx.doi.org/10.1037/0278-7393.8.4.336

Urano, K. (2000). *Lexical simplification and elaboration: Sentence comprehension and incidental vocabulary acquisition*. Unpublished Masteral thesis, University of Hawai'i at Manoa, Honolulu.

Vygotsky, L. S. (1894). *Mind in society: Development of higher psychological processes*. London and New York: Routledge.

Warrington, E. K., & Weiskrantz, L. (1970) Amnesia: consolidation or Implicit versus explicit: An ACT-R learning perspective 8 retrieval? *Nature, 228,* 628-630. http://dx.doi.org/10.1038/228628a0

Webb, S. (2008). Receptive and productive vocabulary sizes of L2 learners. *Studies in Second Language Acquisition, 30*, 79–95. http://dx.doi.org/10.1017/S0272263108080042

Zhexi, W. (2009). The role of glossing and the blank-filling exercise in vocabulary learning through reading: An empirical study. *Teaching English in China, 32*(5), 50-57.

Appendix

Appendix A: Target Words Check

Instructions: Write the meaning of the following words either in English or Persian

Name: Class: Date:

Advantage	Wisdom	In terms of	acclimatize	willingly	Grudge
Productive	Celebrate	Priest	Intervals	Aspect	Exist
supervision	Retrieve	employee	Influential	Vary	Initial
Pace	Patient	Therapy	Extremes	prominent	Relevant
Experiment	Labor	carry out	Release	Reluctant	Extra
Violent	Permanent	entire	Loosely	Chariot	Define
Precisely	unattainable	Component	Participant	Revere	raw
Deal with	Temporarily	Implication	stored	Deliberately	Sacrifice

Appendix B: An example of each of the three types of passages

1. An example of passage given to group A

Throughout the ages, birds have been a source of wonder to all who have observed their soaring flight or listened to their sweet song. As a group, birds are unique. They are the only animals covered with feathers. This evolutionary development separates birds from all other animals.

2. An example of passage given to group B

Words to fill in the blanks: song fly feather wonder soaring

Throughout the ages, birds have been a source of……1….. To all who have observed their…2…. flight or listened to their sweet….3……. As a group, birds are unique. They are the only animals covered with…4……. This evolutionary development separates birds from all other animals.

Deleted words (1- Wonder 2- soaring 3- song 4- feathers)

3: An example of passage given to group C

Words to fill in the blanks: With their sweet the source of

Throughout the ages, birds have been.....1.....wonder to all who have observed …2..... soaring flight or listened to their ……3…..song. As a group, birds are unique. They are the only animals covered ……4….feathers. This evolutionary development separates birds from all other animals.

Deleted words (1.a source of 2.their 3. sweet 4. with)