Comparing the Effect of Glossing and Group Discussion on Incidental Vocabulary Learning of Iranian Intermediate EFL students

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Abstract: *This study concentrated on comparing the effect of glossing and group discussion on incidental vocabulary learning of Iranian intermediate EFL students. The research method was quasi-experimental with pretest-posttest control format in which a group of 50 intermediate students were conveniently sampled and divided into three groups: a control and two experimental groups. Before the treatment, a pretest was administered to the groups. During the eight sessions, a Glossing and Group Discussion approaches was applied to the experimental group. For the other class (control group), the ordinary process of instruction was used, and ultimately, all participants were given a posttest. The data collected from the two tests were then analyzed by running ANCOVA. The results indicated that there was a significant difference between the performances of the two groups, so that the experimental group outperformed the control one. The findings may have important implications for ESL/EFL teachers and material producers.*

1. Introduction

A good number of researchers have investigated the effect of different variables, along with the use of glosses, on vocabulary development. Jacobs (1994), for instance, has examined the recall advantage of glossing by practicing different test conditions (immediate vs. delayed) and demonstrated that glosses can enhance it. Holley and King (1971) also compared different gloss positions in text, i.e., side-of-page, bottom-of-page, vs. glosses on an attached sheet but reported no significant effect for them. Miyasako (2002) too conducted a comprehensive study on the use of glosses and included level of language proficiency as a variable under study. Salem (2006) investigated the impact of different types of electronic glosses on word retention and reading comprehension among second language (L2) Spanish learners, and concluded that the more frequently second language learners consulted electronic glosses, the better they comprehended and acquired new words.

Glossing provides definitions or explanations of obscure words in the margins of a text. Glosses direct readers' attention to unfamiliar words and encourage the processing of the

meanings of the words. Studies have examined the effectiveness of glosses for incidental L2 vocabulary learning for printed materials and found that glosses enhanced vocabulary learning (Hulstijn, 1992; Hulstijn, Hollander, & Greidanus, 1996; Jacobs et al., 1994; Knight, 1994; Paribakht & Wesche, 1996; Watanabe, 1997). With advances in technology, glosses expanded beyond simple texts into multimedia glosses including texts, graphics, videos, and audios (Al-Seghayer, 2001; Chun & Plass, 1996). The previous studies on multimedia glosses found that L2 learners learned unknown vocabulary items better when they looked up a combination of pictures and text definitions than when they looked up definitions alone (Abraham 2007; Chun & Plass, 1996; Plass, Chun, Mayer, & Leutner, 1998; Yeh and Wang, 2003; Yoshii, 2006; Yoshii & Flaitz, 2002). Even though multimedia has brought a variety of types of glosses, L2 learners often prefer textual information among the different types (Davis & Lyman-Hager, 1997; Erçetin, 2003; Laufer & Hill, 2000; Laufer & Kimmel, 1997; Lomicka 1998; Pardo-Ballester & Rodríguez, 2010). Text-based glosses in CALL, therefore, are still important and deserving of further investigation to find ways to utilize them.

2. Review of the Literature

Many researchers have been done on the effects of glosses on incidental vocabulary acquisition. They have mainly on the following issues: what kind of language the glosses shall be in; where the glosses shall be put; and what kind of the glosses shall be in (i.e. multiple choice glosses, monomial glosses, or no glosses).

These researchers will not only analyze different forms of the glosses, but also give a more detailed description of the influence of glosses on second vocabulary acquisition. It can provide a better explanation for the influence of glosses on incidental vocabulary acquisition. In addition, researches in this field are very few in Iran, so it can become a reference for Iranian researchers to do further studies.

In the old days of language teaching, vocabulary learning and teaching were given little importance. As Moir and Nation (2008) write, at one time it was widely assumed that lexical instruction is not essential as it can happen by itself; therefore, the teaching of vocabulary was not popular (Nation, 1990).

However, nowadays, the significance of vocabulary and its significance in learning a language have become more accepted. Vocabulary is a basic component of language proficiency which provides the basis for learners' performance in other skills, such as speaking, reading, listening and writing. Griffiths (2003, 2006) points out, for example, that recently the significance of teaching vocabulary has been acknowledged.

Gass (1999), similarly, states that learning a second language means learning its vocabulary, suggesting that knowing a lexical item means knowing a number of things. She further mentions that Paribakht and Wesche (1999) note that acquisition of vocabulary is an incremental and

perhaps recursive process that involves the integration of various kinds of knowledge along with gaining different levels of ability to make use of that knowledge in communication.

It is said that some deliberate learning strategies such as word part analysis, learning using word cards, and dictionary use (Nation, 2001) are also valuable shortcuts as far as learning vocabulary and vocabulary growth are concerned. Nation also notes that learners need to acquire a few important vocabulary learning strategies such as guessing from context, using word cards, using word parts, using mnemonic techniques, expressing the keyword techniques and making use of dictionaries.

In this study, the term refers to the supply of vocabulary meanings. Providing vocabulary glosses may be an effective way to help L2 learners to understand new words in a specific context. There are several reasons to use glosses in aiding learning. First, they help readers understand new words more accurately, considering the fact that deriving meaning from context is difficult and risky in some aspects (e.g., Stein, 1993; Hulstijn, 1992). Second, frequent input, looking at the words in the glosses and in the context, can help to retain the meaning in the memory longer (Watanabe, 1992). Students prefer to have glosses in their second/foreign language reading materials (e.g., Jacobs & Dufon, 1990). Studies with regard to glossing mostly focused on the effects of glossing on second language vocabulary learning and second language text comprehension. This review will discuss text-based and computerized studies respectively.

Hedge (2000) points out that linguistic studies focus on lexical system and acquisition studies focus on how vocabulary is learned. The idea of how vocabulary is learned is principally related to strategies used by learners as well as approaches to teaching vocabulary. One of the principal controversial issues in vocabulary teaching and learning in the field is how to identify significant approaches and strategies to teaching and learning vocabularies, which result in longer and easier retrieval of the vocabularies.

3. Methodology

3.1 Participants

Fifty (50) students were chosen as the participants of this research through convenience sampling from the whole available population. The sample of the present study was drawn from among 50 students majoring in the Home of Language in Hamedan including 19 males and 31 females at the intermediate level taken from two intact classes at the institute. So, the sampling design of the study was convenience non-probability design.

They aged between 19 and 32, and Persian was their first and English was their foreign language. The participants in this study were selected among Home of Language institute in Hamedan City, Iran. In this language institute about 1000 English learners are studying among which the 50 subjects of our study were chosen.

For the purpose of homogeneity, prior to research a Nelson English Language Test, as a proficiency test, was given to the initial 50 students and 36 students – 13 males and 23 females – whose scores were between one standard deviation minus and plus the mean took part in the study. These, then, were randomly assigned to control and experimental groups, 18 students each.

In order to standardize the research results, all the participants are homogenized. However, the students were gathered in this study as a group without dividing or discriminating the students according to the race, gender or social background. Most of the learners had been studying in Hamedan language schools for at least one year. The subjects of this study were learners of Home of Language Institute who were studying in the same semesters since they are assumed to have a rather similar educational background.

Two classes of non-English-major freshmen of the same proficiency in English took part in the present study.

3.2 Instrumentation

Nelson Proficiency Test

To carry out the present study different instruments were used. The first instrument was the Nelson English Language Test which was used as a tool for homogenizing participants of the study. The Nelson English Language Test is a test including 40 separate tests for ten levels of language proficiency which range from beginner to advanced level.

In order to estimate the proficiency level of the sample population, also, to select homogenized participants, the Nelson Proficiency test (050A) (Fowler & Coe, 1976) was used. It comprises of 50 multiple-choice items that consisted of two sections of structure and vocabulary in the form of multiple-choice questions.

To ensure the participants' homogeneity the Nelson proficiency test was administered to both control and experimental group before the treatment.

Vocabulary Pre Test & Post Test

The Oxford University vocabulary test, as a pretest, was utilized in this study that was included in interchange book. This test included 30 fill-in-the-blank, multiple choice, and cloze-test items.

The post test was a researcher-made reading comprehension test which including reading section. Vocabulary items based on the readings that they have had. The reliability of the test is ensured through the estimation of internal consistency reading Cronbach alpha. If the obtained score is more than 0.70, then it can be claimed that the test is reliable enough. Internal consistency reading Cronbach alpha score is 0.83 which is an acceptable number.

3.3 Procedures

The present study was conducted in the Home of Language English Institute in Hamedan, Iran. Before starting the treatments, the researcher explained to participants about the study, the procedure, and the purposes of the research.

The standard Nelson English language test was administered to 50 participants since just 50 participants were chosen using convenience sampling. The participants answered the proficiency test questions in the standard allocated time. Then, the participants were assigned to experimental and control groups. Next, the pretest was administered. All the tests were finished during normal periods of classes. First, subjects were asked to finish a reading comprehension test, which contains ten comprehension questions after a reading passage.

The reading passage contained 18 target words. After all the subjects had finished the test, papers of this comprehension test were collected. Then the test of the knowledge of the target words was carried out. A week later, a delayed test was given of the new words.

After the pre test and during the treatment phase of study, interchange book was taught to the participants in two groups during 8 sessions in 4 weeks, each week 2 sessions and each session 80 minutes.

In the case of group discussion, the same interchange text book, which included free topics to discuss about, were utilized. After the pre test and during the treatment phase of study, interchange book was taught to the participants in two groups during 8 sessions in 4 weeks, each week 2 sessions and each session 80 minutes. Therefore, the number and the duration of sessions were rather the same. For both control and experimental groups, the units 1 and 2 of the red interchange book were accounted. Note that the control group was treated as the traditional teaching method. Therefore, in this study, we have three groups in which both of them are experimental and the other one is the control group. We consider the groups who were being taught through glossing and group discussion as experimental groups; and the other group was taken as the control group in which lack the teaching procedures of the experimental one. Both experimental groups received the treatment by using materials such as book and dictionary. Almost all the new words were taught incidentally to the both groups.

On the other hand, the same book was taught to the control group, and a dictionary was the only material that was used in the class. It is noticeable that the vocabularies were taught to both groups incidentally. It means that the learners read the vocabularies but they won't know that these vocabularies were used in their tests.

At the end of the treatment period, the post-test was administered to the students in two groups and its results were compared to the results of the pre-test to see if there were any significant differences between the performance of the groups.

3.4 Data Analysis

Case Processing Summary in SPSS 18 was used to check if there was any missing or mortality in the number of participants. In the case of descriptive statistics, mean scores and the standard deviations were utilized.

Pair-wise Comparisons was used to see whether there was any difference between the group discussion and glossing methods. ANCOVA and data normalizing formulas were used in this study. Researcher distributed pretest and posttest to both groups and the results will be compared in the next chapter.

4. Results and Discussion

4.1 Descriptive Statistics for the Groups

The descriptive statistics of the participants' pre-test and post-test scores are presented in table 1.

Table 1: The Results of the Participants' Pre-Test and Post-Test Scores in the Groups

Case Processing Summary

	Groups	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Pretest	Gloss	15	100.0%	0	.0%	15	100.0%
	Discussion	15	100.0%	0	.0%	15	100.0%
	Control	15	100.0%	0	.0%	15	100.0%
Posttest	Gloss	15	100.0%	0	.0%	15	100.0%
	Discussion	15	100.0%	0	.0%	15	100.0%
	Control	15	100.0%	0	.0%	15	100.0%

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Groups	45	1.00	3.00	2.0000	.82572	.000	.354	-1.535	.695
Pretest	45	9.00	30.00	19.3333	5.54732	.258	.354	-.831	.695
Posttest	45	11.00	34.00	23.7778	5.98061	-.382	.354	-.796	.695
Valid N (listwise)	45								

As Table 1 indicates, Skewness and Kurtosis values are within the ranges of +/- 1.96, which indicate that the data are descriptively normal for both pretest and posttest. However, to get inferential evidence for normality of the data, normality assumptions are first checked. These

include normality of distribution of test scores, homogeneity of regression slopes, linearity assumption and equality of error variances.

Table 2: Analysis of Covariance (ANCOVA)

Dependent Variable: Posttest

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1328.724[a]	3	442.908	74.103	.000	.844
Intercept	389.131	1	389.131	65.106	.000	.614
Pretest	611.213	1	611.213	102.262	.000	.714
Groups	670.109	2	335.054	56.058	.000	.732
Error	245.053	41	5.977			
Total	27016.000	45				
Corrected Total	1573.778	44				

a. R Squared = .844 (Adjusted R Squared = .833)

As it is shown in Table 2, the row for the pre-test shows that the pre-test was significantly related to the post-test (P-value < 0.05) with the magnitude of .714. The row for Groups is the indicator of the main effect of the treatment on the dependent variable. As it can be seen, the values obtained pointed to a significant effect of the treatment on the groups [$F(2,41) = 56.05$, P= 0.00, P< 0.05, partial η^2 = .732)], which could imply that there were significant differences between the mean scores of the groups on the posttest after removing the possible effects of their entry knowledge as tested through the pretest.

4. **Conclusions and Recommendations**

Upon completion of treatment, the results of the study indicated that in the experimental groups, in contrast to the control group, there were considerable improvements in L2 incidental vocabulary learning. Although both groups showed a certain degree of improvement, experimental groups outperformed the control group in a statistically significant level. As the results of analysis of covariance (ANCOVA) indicated, the null hypothesis of the study was rejected. At last, it was concluded that glossing and group discussion can contribute to the improvement of L2 incidental vocabulary learning in the Iranian EFL context and learners can benefit to a large degree from mediation.

In other words, they show enhancement of L2 incidental vocabulary learning through experiencing glossing and group discussion intervention. But in this study, there were two experimental groups naming the one which was experiencing glossing and the one which was

experiencing group discussion. Among these two experimental groups, it is noticeable that the results of the group discussion are slightly higher than those of the glossing. Therefore, it can be easily concluded that the role of group discussion is more prominent than the role of glossing in improving L2 incidental vocabulary learning.

Accordingly, in the future studies, more subjects should be included in the experiment to improve the generalization of the conclusion. In addition, subjects of different proficiency, including college students of different grades, junior and senior high school English learners, between the testing sections may be included. Last but not least, the time span should be lengthened to thoroughly long-term the present effects of different types of treatments.

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