

Vocabulary Glossing: A Comparison between L1 Gloss and L2 Gloss in EFL Context

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ABSTRACT

This paper describes a study exploring the effect of vocabulary glossing, L1 gloss, L2 gloss and no gloss, on L2 vocabulary learning. A total of 60 intermediate Iranian students participated in this study. They were divided into three groups: Group one in which students read a text that its new vocabularies were glossed in L1 (Persian); Group two in which new vocabularies were glossed in L2 (English) and group three with No gloss provided. Each group was going to take a vocabulary test at the end of the study based on the provided vocabulary glosses during the study. For the purpose of this research a pretest posttest design was run. The comparison between the three groups pinpointed that No glossed condition had significant difference with L1 and L2 glossing, but there was no significant difference between L1 and L2 vocabulary glossing even though the mean score in L1 glossing condition had improved more than L2 glossing condition in the posttest. It was also revealed that EFL students had positive attitude toward L1 vocabulary glossing.

Keywords: Vocabulary learning, vocabulary gloss, EFL students; L1 gloss and L2 gloss

1. INTRODUCTION

According to studies done by scholars (e.g., Day, Omura, & Hiramatsu, 1991; Dupuy & Krashen, 1993; Gass, 1999; Paribakht & Wesche, 1999; Wode, 1999) an L2 learner can learn new words incidentally while reading. On the other hand, others like Nagy, 1997; Nation, 2001; Sokmen, 1997; Stein, 1993 suggests that learning words from context while focusing on meaning is an inefficient method because of the limitations inherent in deriving meaning from contextual cues. As Hudson (2007) stated, it still is not clear how incidental vocabulary learning occurs or what amount of exposure is required for readers to learn these words. Vocabulary glossing has been found to be conducive in L2 vocabulary learning. Vocabulary glossing has two types: L1 glossing in which students are provided with a list of vocabularies that their definitions have been given in students L1, for example students with Persian first language who are learning English vocabularies are provided with Persian definition of those vocabularies. On the other hand, L2 glossing is another types of vocabulary glossing in which students are provided with L2 definitions of new vocabularies, for instance, students with Persian first language who are learning English vocabularies are provided with English definition of those vocabularies. The current study examines the effect

of glossing on L2 vocabulary learning. In this study both types of glossing have been examined. In this study, students' opinions about different types of glossing have been investigated.

1. 1. Review of Literature

Glossing is considered as one type of input modification that is a pedagogical intervention in which a teacher manipulates a target form to help learners acquire the form (HEE KO 2012). For instance, reading passages in second language learning are often modified to meet the learners need. The structures of text are manipulated and vocabulary items are controlled to enhance comprehension and thus learning (Larsen-Freeman & Long, 1991). A number of studies have compared a simplified version with an elaborated version using listening materials (e.g., Chaudron & Richards, 1986; Chiang & Dunkel-Schetter, 1992; Kellerman, 1985) as well as reading passages (e.g., Johnson, 1981; Oh, 2001; Strother & Martin, 1987). Likewise, glossing can be used as modified input to facilitate vocabulary learning. By providing additional information such as definitions or synonyms, glossing helps students cope with insufficient contextual cues in learning new words while reading.

A number of studies have looked at the effect of input modification on L2 vocabulary learning using glossing. However, the design of these studies is diverse due to their different purposes in examining glosses. Holly and King (1971) compared different types of glosses depending on the place where a gloss is presented, such as side of page, bottom of page, or on an attached sheet. Hulstijn, Hollander, and Grondanus (1996) investigated incidental vocabulary learning using marginal glosses and dictionaries. They also tested the effects of word frequency, either once or three times in the text. Hulstijn (1992), Watanabe (1997), and Nagata (1999) were interested in investigating the effect of multiple-choice (MC) glosses with other types of glosses or input, such as repetitive, single-gloss, and no-gloss conditions. Rott, Williams, and Cameron (2002) examined the effect of a first language (L1) MC gloss and L2 text reconstruction on lexical acquisition and retention and text comprehension.

In addition, the effect of L1 and L2 glosses also was compared in a few published studies: Jacobs, Dufon, and Hill (1994) with paper-based texts, and Laufer and Hill (2000) and Yoshii (2006) in a multimedia environment. Jacobs et al. compared the effect of L1 and L2 glosses with Spanish as the foreign language. They tested L1 gloss, L2 gloss, and no-gloss conditions on 85 native speakers of English enrolled in a fourth-semester Spanish course in a U.S. university. After reading a passage, students were asked to recall the passage and translate the glossed vocabulary from Spanish to English. They did the translation again after 4 weeks. The results show that the original glossing did not have any significant effect in helping them recall the passage. On the immediate vocabulary translation test, there was a significant difference between the gloss groups and the no-gloss group. However, there was no significant difference between the L1 gloss and L2 gloss groups. On the delayed vocabulary test given after 4 weeks, no significant difference was discernible between the gloss groups and the no-gloss group, or between the L1 gloss and L2 gloss groups.

Yoshii (2006) compared the effectiveness of L1 and L2 glosses along with pictorial cues in a multimedia environment. The study involved 195 Japanese university students. Yoshii assumed that they belonged to a low-intermediate or intermediate level. A week before the experiment, students took a vocabulary pretest, a recognition test containing 14 target words and 10 additional distracters. While reading a 390-word story, including the 14 target words, students could click a gloss and look up four types of glosses on the screen when needed: L1 gloss, L2 gloss, L1 gloss with a picture, and L2 gloss with a picture. After they finished the reading, an immediate vocabulary test (definition-supply test in the L1 and recognition test in the L2) was given. After 2 weeks, a delayed vocabulary test with the same

format was given. The results show that, regarding the definition-supply test, L1 and L2 gloss groups did not show a significant difference between the immediate and delayed vocabulary tests. However, in the case of the recognition test, the L2 gloss group dropped significantly on the delayed vocabulary test.

On the whole, more studies comparing L1 and L2 glosses are necessary. The reason is that the comparisons between L1 and L2 are still limited: Jacobs et al. (1994) compared English and Spanish, Yoshii (2006) compared Japanese and English, and Laufer and Hill (2000) compared Hebrew, Chinese, and English. Moreover, there are concerns that have not been addressed. For example, Jacobs et al. and Yoshii found no significant differences between L1 and L2 gloss groups on an immediate vocabulary test. However, according to Laufer and Hill, Hong Kong learners showed a significant difference between these gloss types, whereas Israeli learners did not. It is unclear what conditions are and are not differential among these groups. Given that the number of studies is quite limited and important questions are still unanswered, replications are needed in order to verify the results of previous studies and to provide better insights into this area.

This study is designed to investigate the effect of L1 and L2 gloss and No gloss on L2 vocabulary learning in a six week period. In this study in the beginning of the program a pretest was held and at the end of the program a posttest was held to indicate the changes in students' vocabulary learning. At the end of program there was a questionnaire to survey students' preference about L1, L2 or No glosses.

This study is going to investigate the following question:

- A) Is there a difference in vocabulary learning between the L1, L2, and No glosses in an EFL context?
- B) What are learners' opinions about different glossing items?

2. METHOD

2. 1. Participant

A total of 60 intermediate students in English Academic Institute in Qazvin, Iran all male and ranging in age from 18 to 20 years participated in this study. All of these students were originally from Iran and English was a foreign language for them. The participants were recruited to voluntarily participate in an English Vocabulary Learning Program (EVLP). These 60 students who were at intermediate level of proficiency were descended from 89 students who participated in vocabulary proficiency test that was administrated by the institute prior to the start of program to rank different level of proficiency. According to obtained scores, 23 students were in upper-intermediate level of proficiency, 3 were in advanced level of proficiency, and 16 were in pre-intermediate level of proficiency with regard to English vocabulary knowledge. For the purpose of this study, 60 intermediate students were chosen to test the research question on them. They were divided into three groups each included 20 students. Each group got on glossing condition based on three glossing condition, L1 gloss, L2 gloss, and No gloss. Three experienced non-native teacher were responsible to teach English vocabulary based on the specific glossing conditions. The EVLP took about 6 weeks and there were 12 sessions of it. Students attended two sessions each week. The duration of each session was one and a half hour.

2. 2. Materials

Some reading texts from “Read and Understand” (Betty Kirkpatrick, Rebecca Mok) were chosen for students in which the proficiency level of texts suited with the participants level. The feature of these texts was that they could be used for each group. For the first group there was provided L1 gloss (See Table 1) for each unit in Persian; it was participants’ first language.

Table 1. L1 Gloss.

Vocabulary	L1 Gloss
Biodegradable	تجزیه پذیر
Conservation	نگهداری- حفاظت
Pollution	آلودگی- ناپاکی
Decompose	ارز هم پاشیدن- تجزیه کردن- خلاص شدن از
Disaster	بدبختی- مصیبت- بلا
Recycle	تجدید یافتن

For the second group L2 gloss (See Table 2) was prepared and was placed at the end of each unit.

Table 2. L2 Gloss.

Vocabulary	L2 Gloss
Biodegradable	A type of material which will naturally decay relatively quickly because of action of bacteria on it.
Conservation	The act of protecting and preserving something, especially the environment.
Pollution	The act or process of causing something, such as the environment, air or water, to become dirty.
Decompose	To be broken down by action of bacteria; to rot or decay.
Disaster	An unexpected event that causes a lot of damage, destruction, injury or death.
Recycle	To put material or an object through some kind of process that allows it to be used again.

In the third group, the control group, there was no vocabulary gloss not in L1 or in L2 and the students were responsible in looking up each unit new vocabulary. The researcher also prepared two cloze tests in participants’ proficiency respect.

One of those tests was administrate at the beginning of the program for the reason of identifying students’ proficiency level and one at the end of the program to capture the trend of students’ change in their proficiency level, if any. In this study SPSS16 was used to improve the accuracy of analyzing data.

2. 3. Procedure

A total of 60 Iranian EFL students who were in intermediate level of proficiency in regard with English vocabulary participated in an English vocabulary Learning Program that was provided by English Academic Institute sited in Qazvin, Iran. During six weeks students in three groups were under vocabulary instruction based on three vocabulary glossing: L1 glossing, L2 glossing, and No glossing. In the first group L1 vocabulary gloss of each unit new vocabularies was provided for students to learn about them.

The second group was the same as the first one with this difference that the L2 vocabulary gloss was prepared for students of this class for learning new vocabularies. The third group has a basically difference and it was that in this group no gloss was prepared for students and they were responsible for looking up the vocabulary by themselves. In the beginning of each session, students in group one and two were allowed to study the provided vocabulary glosses in L1 and L2 and then read the text and do its exercises.

There was limited time for students to study the glosses; the allotted time was about 20 minutes for each gloss that contained about 10 new vocabularies. Yet in the third group the situation was quite different. Students were given the same texts and exercises but they were responsible to look up new vocabulary by themselves.

They were allowed to use bilingual or monolingual dictionaries by their preference. Teachers were supervisor in all groups. They were responsible for helping students with vocabularies' pronunciation, and controlling the correctness of the exercises and doing some pre-reading and post-reading activities.

The teacher of third group, No gloss group, was also responsible for helping students with finding new vocabularies in their dictionaries. Prior to the start of the program a pretest in the type of cloze test was administrated for two purposes: first, to assure researcher that the proficiency level of the participants was the same level and they are homogenous; second, to obtain the beginning level of students with the obtained mean score for future comparison.

In session 15, a test of students' preference in glossing and glossing type was held (Table 3). The result of this test will be discussed in the result section. At the last session, session 16, the posttest was administrated to all groups. The obtained data then was transferred to SPSS to be analyzed.

3. RESULT

As it was said earlier prior to the start of the program a vocabulary proficiency test was administrated for all groups to assure the researcher that participants were within the same realm of proficiency in regard with English vocabulary. Table 3 is showing the obtained results.

Table 3. Descriptive Statistics for Vocabulary Proficiency Test.

Group	N	Minimum	Maximum	Mean	Std. Deviation
L1Gloss	20	34.00	90.00	57.8500	14.37569
L2Gloss	20	42.00	88.00	58.0500	14.84118
No Gloss	20	39.00	92.00	59.3500	15.85465
Valid N (list wise)	20				

As it is clear with the comparison of the obtained means score one can draw the conclusion that all groups were in the same level of vocabulary proficiency in the beginning of the program. This fact is a good prove for the effectiveness of the proficiency test that was administrated to divide participants to different proficiency groups. This vocabulary proficiency test was also used as a pretest to be compared with the posttest.

The alpha level for all statistical analysis was set at 0.05. A one-way ANOVA was conducted to analyze group differences in performance on the posttest. The reliability of the posttest vocabulary test was 0.84, measured by Cronbach's alpha. Table 4 intends to show the descriptive statistics of posttest.

Table 4. Descriptive Statistics of Posttest vocabulary.

Groups	N	Minimum	Maximum	Mean	Std. Deviation
P-L1Gloss	20	38.00	91.00	61.3500	15.16671
P-L2Gloss	20	42.00	91.00	59.2000	14.64887
P-NO Gloss	20	39.00	90.00	56.8000	15.05289
Valid N (list wise)	20				

P: Stands for Posttest

Table 4 shows this fact that the mean score of L1 gloss (61.35) has improved more than the mean scores of L2 gloss (59.2). Yet, the decrease in mean score of no gloss condition is quite interesting. The result of a one-way ANOVA indicated that there was a significant difference between the three conditions ($F(2, 103.61) = 0.63, p < 0.5$). For the purpose of indicating the specific place of significance, a Scheffe's post hoc analysis was conducted. This test showed the significant difference between the no gloss condition and the glossed conditions; nevertheless, there was no significant difference between the L1 and L2 gloss conditions. A paired t-test was conducted for each type of gloss condition to see if there is any significant vocabulary learning in any of gloss conditions. The paired t-test indicated that there was no significant effect in the no gloss condition ($t(19) = .23, p > .5$). However, there were significant differences in L1 and L2 glosses condition.

There was also a test of gloss preference among participants to indicate the percentage of each gloss condition preference among participants. Table 5 illustrated the obtained data.

Table 5. Participant Preference in Glossing Condition.

Gloss Condition	Percentage of Preference
L1 Gloss	60 %
L2 Gloss	26 %
No Gloss	5 %
Others	9 %

As Table 5 illustrates L1 vocabulary glossing had got the highest percentage (60 %) and was the most acceptable technique of vocabulary glossing selected by participants. L2 vocabulary glossing was in the second place of favorite based on the participants' desire. With 26 % of desirability percentage, L2 vocabulary glossing can be considered for second thought in the EFL vocabulary learning context. Finally, no gloss condition with just 5% of acceptability was the lowest among the three groups. The questionnaire also sought other preferable techniques like teacher translating meaning, computer-assisted language learning, association of meaning, and etc. The obtained percentage (9 %) of these techniques showed that using these techniques can be effective and they are good subjects for future researches.

4. DISCUSSION

The results of this investigation support that vocabulary glossing in has a significant effect on vocabulary learning in the EFL context, thus supporting the findings of previous investigation (Lauffer & Hulstijn, 2001; Schmidt, 1993; Yoshii, 2006). The first research question was: Is there a difference in vocabulary learning between the L1, L2, and No glosses in an EFL context? The results showed that there is a significant difference between glossed condition and no glossed condition. Based on the results, participants in the glossed condition had better vocabulary learning at the end of the program than those of no glossed condition. This finding is similar to the findings of Myong Hee (2012). The mean score for L1 and L2 glosses in the pretest were 57.85 and 58.05 respectively and this amount reached 61.35 and 59.20 at the posttest that crystal clearly shows improvement in participants of glossed condition groups' vocabulary learning. However, the mean score for no glossed condition at the pretest time was 59.35 and with a considerable decrease it became 56.80.

The rational reason for the L1 glossed condition increase in mean score is that in EFL context the translating is the core technique in conveying meaning of the new vocabulary. By so doing, it became a habit of learning for students and they grabbed it in their learning of new materials such as learning vocabulary. The participants' preference in choosing L1 gloss as the desired gloss is a good prove for this claim. It seems that guessing words from context which is used by no glossed condition group has no effective impacts on vocabulary learning in the EFL context but it also has a reverse effect. The previous studies also showed that guessing on unknown vocabulary may not be effective (Aebbersold & Field, 1997; Ko, 2012).

Another explanation of why learners performed better on the glossed text according to Ko (2012) may be related to the effects of input modification. Learners may have had a better chance to have their attention drawn to the targeted vocabulary when glosses have been prepared for them. Regarding comparison between L1 and L2 glossing, the result of this study contrast with those of Yoshii (2006) and Ko (2012) in that L2 glossing had the significant impact on vocabulary learning of EFL students, yet in this study it was concluded that L1 due to some educational system principles had a significance effect on the vocabulary learning of EFL students.

The second question of the current investigation was: What are learners' opinions about different glosses types? For answering this question Table 6 is quite comprehensive in which it showed that 60 % of participants desired L1 gloss, 26 % desired L2 gloss, 5 % desired no gloss, and 9 % desired other types of vocabulary learning. The simple fact here is students in EFL context and especially in Iran has a method of translating for their vocabulary learning so this translating method has become a habit of their learning and for such they are very convenient with L1 glossing and as one compare their mean score in the L1 glossed condition was higher than that of other vocabulary glossed condition. As Ellis (2003) and Farhadi (2000) stated the system of language learning in Iran is not for communicative purposes but to translating and L1 gloss is the best method of achieving this.

5. CONCLUSION

The aim of this study was to investigate the effect of different glossing types on learning L2 vocabulary in an EFL context [15-22]. To draw the conclusion on this aim, first a comparison have done between the no gloss condition and glossed condition. The findings showed that while no glossed condition had no effect on L2 vocabulary learning; glossed condition has a positive effect on L2 vocabulary learning; thus the results are supporting previously done research on this (Jacob, 1994; Yoshii, 2006; Ko, 2012); and then another comparison was done between the two glossing condition.

This study also shows comparison with previously done research on whether L1 gloss is more effective in EFL context or L2 gloss for learning new vocabulary. This investigation's answer to this quest was L1 gloss based on the comparing means of the tree glossing condition. Yet, others like Ko (2012) and Nagata (1999) indicated that L2 gloss is more effective in L2 vocabulary learning in the EFL context.

A third comparison was done about the among the participants preference on glossing types that according to the results L1 gloss was in the first place of desirability. It was discussed that the desirability of L1 gloss may because of the system of L2 education in EFL countries. L2 gloss was placed after L1 gloss, yet it is important for teachers to use this glossing type because of the fact that it had a relatively high desirability percentage.

The current study devoted its own purpose to study the glossing types in vocabulary learning with regard to intermediate EFL students. It is important to note that the context of the research was EFL and the participants were in intermediate level of proficiency, so further researches examining other proficiency level and ESL context regarding the different glossing types would be useful follow up to this study. Future researches need to access whether the processing of L2 vocabulary learning triggered by glossing condition lead to long-time vocabulary retention and learning. The pedagogical implication of the finding of this study for L2 vocabulary learning in EFL context is that vocabulary glossing condition in L1 or L2 would be excellent means to teach students about new vocabulary of L2. So it is important for teachers and language planners to consider these vocabulary glossing conditions in their perspective of teaching new vocabularies.

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