The Effect of Gloss on EFL Learners' Reading Comprehension

Mahdiyeh Karimvand

Ph.D student in English Language Teaching, Ataturk University, Turkey.

Email: mahdiyeh.karimvand@gmail.com

Abstract: *Researchers as well as educators have shown a general interest for investigating techniques that facilitate reading in a foreign language. One such technique that recently has come under closer inspection in the area of second or foreign language acquisition research is glossing. This study aimed to explore the effect of glosses on high school students' reading comprehension. Subjects of the study were 80 second grade students in a high school in Sarab, East Azerbaijan, Iran. In order to accomplish the purpose of the study, the following tests and materials were used. First, a general English test determined the homogeneity of the subjects. Then a passage serving as the reading comprehension passage with three glossing conditions (textual, visual (pictorial), and textual-pictorial) with the related multiple-choice questions, prepared. In order to become sure that the subjects have no previous familiarity with the words which will be glossed a pre-test was given to the participants. Those students who knew one or some of the words, were excluded from the study. Students were grouped according to their proficiency levels, and were randomly divided into experimental and control groups reading with or without glosses. Data were collected through multiple-choice reading comprehension tests. After the required data was collected, the computer program of SPSS applied. Thus the data was analyzed and interpreted through conducting descriptive statistics. A one-way analysis of variance (One-way ANOVA) was run to determine whether there was significant differences among the performances of 4 groups. A Post-hoc comparison also run to determine the exact differences among the groups. The results indicated that the experimental groups performed significantly better in reading comprehension tests than the control group. This study concluded that different types of gloss facilitated high school student's reading comprehension. In addition, text difficulty determined student's use of glosses while reading.*

Keywords: *Gloss, Textual Gloss, Pictorial Gloss, Textual-Pictorial Gloss, Marginal gloss, L1, L2, L1 Gloss, Reading comprehension*

INTRODUCTION

Undoubtedly, words are the building blocks of language and the lack of words will surely become an obstacle to the acquisition of other aspects of language including reading, writing, listening and speaking. Foreign language vocabulary plays an important role in achieving high-level of reading ability and enhancing comprehension. Studies conducted in the field of second language (L2) learning have revealed that the impact of gloss types on reading comprehension is an issue of debate. What is in a gloss? Glosses are many kinds of attempts to supply what is perceived to be deficient in a reader's procedural or declarative knowledge. Researchers as well as educators have shown a general interest for investigating techniques that facilitate reading in a foreign language. One such technique that recently has come under closer inspection in the area

of second or foreign language acquisition research is glossing. Glosses, usually placed at the margin of the text, can be textual, visual (pictorial), both textual and visual or auditory (Yanguas, 2009).

Input is important in language learning. However, aural input is often limited in the EFL contexts. On the other hand, reading is a relatively steady and reachable source for all FL learners. It can be beneficial for FL beginning learners if the materials are appropriately chosen and the instruction procedure is attractive (Chen, 2004). Moreover, reading can develop learners' independent ability to learn that language. To compensate for limited class time and input outside the classroom, EFL students should be encouraged to do autonomous readings. As Doctorow, Marks and Wittrock (1975) suggested, in certain contexts, one single unfamiliar word can render a sentence or even a whole passage incomprehensible. Since vocabulary glosses are a common feature in EFL reading materials, and they have been proved to be able to facilitate students' reading comprehension in L2 learning contexts and enhance students' reading motivation in EFL junior and senior high school contexts by some researchers (Chen, 2004; Huang, 2003; Ko, 2005), it is worthwhile to investigate how vocabulary glosses work for high school students in terms of reading comprehension and reading process.

Even though there are several ways for presenting and introducing new vocabulary in a reading comprehension passage, glossing (textual and/or pictorial) have not been well appreciated at least in Iranian schools. In order to get the meaning of unfamiliar words within a text, and hence, understanding the text itself, students usually refer to their dictionaries. These dictionaries (bilingual or monolingual) most often provide several meanings for a single word and make it difficult for the students to choose the appropriate meaning matching the word in the passage. In addition, almost everybody knows that this is a very time-consuming and boring method and it distracts the attention of the reader from what he or she is reading. Another way is guessing the meaning of the unfamiliar words from the context clues. Though guessing from context seems a good way, it cannot be considered as a secure and reliable strategy. The problem with guessing is that readers often make erroneous guessing and as a result they learn words incorrectly. The main purpose of this study is to examine the usefulness of marginal textual and/or pictorial glossing on reading comprehension ability of students. Marginal glossing is believed to provide a just-to-the-point meaning (through translation, explanation, or pictures) for the unknown words in a reading comprehension text and, therefore, removes the possibility of misunderstanding on the part of students. The comparison of the function of three conditions of glossing-textual, pictorial, and a combination of the two-is another problem that the present study is concerned.

Concerns about the function and usefulness of glossing form the basis for the research questions of this study. Three conditions of glossing, namely textual, pictorial, and textual-pictorial, will be examined and compared with regard to their effects on reading comprehension ability of subjects. Consequently, the following four research questions are going to be answered in the study:

1. Will readers using gloss in general perform better on the reading comprehension test than readers using no gloss?
2. Will readers using pictorial gloss perform better on the reading comprehension test than readers using textual gloss?
3. Will readers using textual-pictorial gloss perform better on the reading comprehension test than readers using only pictorial glossing?
4. Will readers using textual-pictorial gloss perform better on the reading comprehension test than readers using only textual glossing?

Considering the above research questions, the researcher poses the following four hypotheses with the hope that the results of the study will support them.

1. Readers using gloss will perform better on the reading comprehension test than readers using no gloss.

2. Readers using pictorial gloss will perform better on the reading comprehension test than readers using textual gloss.
3. Readers utilizing textual-pictorial gloss will perform better on the reading comprehension test than readers using only pictorial glosses.
4. Readers utilizing textual-pictorial gloss will perform better on the reading comprehension test than readers using only textual glosses.

Methodology

Participants

Subjects were 80 (n=80) female Iranian EFL learners enrolled in an English as a Foreign Language (EFL) course in Sarab city, who were selected from an initial pool of 100 volunteers. The school was selected according to accessibility. They were invited to participate in the research by an announcement at a high school. They ranged in age from 15 to 16, and were assessed based on their knowledge of the target words in the study. Therefore, besides being homogeneous in terms of the level of English Language Proficiency, total lack of familiarity with the final pool of 21 target words constituted the second criterion for participant selection.

Materials

The reading passages used in this study were selected from the book *Reading Through Interaction* based on the materials prepared by P. Hartmann and M. Kim (1946) and edited by Mirhassani and Farhady (2001). In order to gloss the target words in the three modes of instruction, it was required that clear definitions as well as pictures be provided. The textual definitions were extracted from *Aryanpour English Persian Collegiate Dictionary* (1967) and the pictorial definitions were extracted from the Internet. The text should contain some unknown words hindering the subjects' understanding of the texts, so the effect of glosses on comprehension could be investigated. However, the text should not be too difficult, otherwise every word need to be glossed. The choice of which vocabulary items to be glossed and the vocabulary words in the glosses were determined by (a) the results of the pre test, and (b) the experience of the researcher.

Instruments

Instruments used in this study included a reading text, a multiple-choice comprehension test, textual gloss in which students receive L1 translations of each word, pictorial gloss in which students receive pictures of each unfamiliar word. The multiple-choice comprehension test measured the effect of glosses on students' reading comprehension. In order to guarantee the close homogeneity of the groups, prior to the treatment, the following steps were taken: 1) only those students with scores above 18 in English course were selected. 2) An oral vocabulary test was administered to check their vocabulary knowledge. The test was supposed to grade and place students into appropriate levels. This test was held orally. Students were asked some words to recognize their vocabulary knowledge.

Procedures

Once the researcher made certain that the participants formed a homogenous sample, the participants were randomly divided into four groups of 20. Four versions of the same texts were designed, each displaying one type of gloss, textual, pictorial or textual – pictorial (combination of two), and a text without gloss. Students had 40 minutes to read the text and answer the questions. The participants managed to finish activities within the allocated time.

Data Analysis

After the required data were collected, the computer program of SPSS applied. Thus the data analyzed and interpreted through conducting descriptive statistics. A one-way analysis of variance (One-way ANOVA) ran to determine whether there were significant differences among the performances of 4groups.A Post-hoc comparison also ran to determine the exact differences among the groups.

Results and Discussion

In this research four groups have been examined. First group was control group and recieved no gloss. Our control group that were 20 female high school students received multiple – choice comprehension test without any gloss. They read the text and then answered to the questions. They couldn't use dictionary, and only guess the meanings of target words. The second group read the text with pictures of target words, they understand the meanings of target words by their pictures. The third group read the text with target words' L1 translation. Forth group received textual- pictorial gloss. All of the students in 4 groups had 40 minutes to read the text and answer to the multiple-choice questions. In this part, descriptive information of glosses and results are given.

Question 1: Will readers using gloss in general perform better on the reading comprehension test than readers using no gloss?

Results: According to results there are significant differences between groups' mean squares. This difference is meaningful in α =0.00

Results show that readers using gloss perform better on the reading comprehension test than readers using no gloss.

2. Will readers using pictorial gloss perform better on the reading comprehension test than readers using textual gloss?

Results: There are significant differences between textual and pictorial groups mean in α=0.001. So, we can conclude readers using pictorial gloss perform better on the reading comprehension test than readers using textual gloss.

3. Will readers using textual-pictorial gloss perform better on the reading comprehension test than readers using only pictorial glossing?

Results: According to results there are significant differences between textual-pictorial and only pictorial groups' mean in α=0.000, It means that, readers using textual -pictorial gloss perform better than readers using only pictorial gloss.

4. Will readers using textual-pictorial gloss perform better on the reading comprehension test than readers using only textual glossing?

Results: According to results significant differences exist between textual – pictorial group and only textual group mean in α=0.000. In consequence, groups using textual – pictorial gloss perform better than groups using only textual gloss.

Conclusions, Implications and Suggestions

Conclusions

Glossing has been recognized as one of the most effective instruments for facilitating L2 learners' reading comprehension and there have been controversial results regarding the effect of gloss types on EFL students' reading comprehension. Therefore, this study aimed to ascertain the effect of gloss types on Iranian EFL students' reading comprehension. The study reported here confirmed the previous findings. Furthermore, it also revealed that learners will indeed learn significantly better when they are provided with more input presentation modes. When learners are reading, their attention to new words is attracted by the gloss and their knowledge of the unknown words is enriched by the rich context in the reading material. In addition, the presence of gloss can reduce students' burden of dictionary consultation, avoid the interruption of reading process and prevent learners from making wrong inference for the unknown words in the particular context. Thus, gloss can not only ensure learners' exact understanding of the text but also help learners know the

meaning of the new words. There were significant differences in the reading performance between the experimental and control groups. Those who read the text without glosses used far more strategies than those who read the glossed texts, for they were able to translate the content sentence by sentence smoothly with help of the glosses in the margin. This research favored the use of the pictorial-textual gloss as the most effective type of vocabulary annotation aiding in reading comprehension.

Pedagogical Implications

This study aimed to investigate whether and how EFL high school students can benefit from glosses. It is hoped that the findings in this study can shed light on teaching English to students at this educational level. The following are the pedagogical implications of this study for English teachers and textbook writers at his level. First, the use of different kinds of glosses may be promoted in EFL high school level reading. As indicated in this study, subjects in the experimental group performed significantly better than those in the control group. Also, students generally preferred reading with glosses. Therefore, gloss would be a helpful aid for teachers to implement reading instruction in the high school level. Teachers may raise students' awareness to use glosses while reading, teach students to use glosses as a pre reading strategy, or guide students to use glosses to confirm the meanings of texts. Via these ways, the effect of gloss would be maximized. Second, teachers may keep learners' proficiency levels in mind, and choose appropriate texts accompanied by glosses to cater to different levels of students. The present study showed that the glosses did not significantly enhance high-proficiency students' reading performance, and were regarded by them as not helpful in their reading because the text was easy. On the other hand, most low-proficiency students were able to comprehend the text above their present level thanks to the gloss. Therefore, when the students' proficiency is in a wide range, teachers may classify the students in two or more levels and then provide different texts accompanied by glosses for the students of different levels. This way, glosses could scaffold students in all levels to read texts above their current level and facilitate their independent reading. Third, in addition to glosses, teachers may use other instructional strategies or activities, such as readers' theatre or small-group discussion to motivate students to read in L2. The findings of this study also have implications for ELT reading comprehension material development. Course designers may include various kinds of glosses based on students' level of proficiency, the topic and the kind of word to be addressed. Teacher training centers may raise the would-be teachers' awareness about the potential role of glosses and different ways of incorporating them in their reading comprehension classes.

Limitations and Suggestions for Future Research

There are three main limitations to the present study. First, the low reliability coefficients of the production task items that make us interpret the results on production with caution. Second, the lack of measurement for the time spent on task by every group. Finally, some participants' comments seem to suggest that some of the pictures were difficult to understand, which could have affected the results. To counter this limitation, what glosses were accessed how many times and for how long could have been controlled. This study examined the incidental learning of twenty-one concrete nouns. Aside from the fact that twenty-one is too small a sample to provide us with airtight proof, a similar study is needed to investigate abstract nouns. A similar study could investigate the effect of the three annotation types on the incidental vocabulary learning of male students. There were a large number of comments, feedbacks, and gestures from students that resulted from throughout the events encountered during the experiment. However, the task of running this quantitative study did not allow the researcher to appreciate such invaluable pieces of qualitative data. It is suggested that another study focus on qualitative aspects of teaching and learning with glosses. The present research focused on the effects of glosses on the reading comprehension of high school EFL learners. It might be intriguing to explore the effects of glosses on the comprehension of students of other levels of language proficiency. This experiment was a one-shot study. Follow-up research should be longitudinal, thus exploring the likely contributions of glosses to reading comprehension over a relatively long span of time. Only through such

experiments can one accurately estimate the efficiency (or inefficiency) of different kind of glosses. Moreover, there are other types of glosses, such as aural and video glosses, whose effects on learning can be investigated.

References

1. Chen, Y. M. (2004). The effect of marginal glosses on reading comprehension and vocabulary learning. Unpublished master's thesis, National Taiwan Normal University, Taipei City.
2. Doctorow, M., Marks, C. & Wittrock, M. (1975). Reading as a generative process. Journal of Educational Psychology, 67, 484-489.
3. Farhadi, H. & Mirhasani, A. (2001). Reading Through Interaction (pp. 15-22). Tehran: Zabankadeh Press.
4. Huang, Y. (2003). The effects of vocabulary glosses and example sentences on junior high school EFL students' reading comprehension and vocabulary learning. Unpublished master's thesis, National Cheng Kung University, Tainan City.
5. Ko, M. H. (2005). Glosses, comprehension and strategy use. Reading in a Foreign Language, 17, 125-143.
6. Yanguas, I. (2009). Multimedia glosses and their effect on L2 text comprehension and vocabulary learning. Language Learning and Technology, 13(2), 48-67.