Comparing the Effect of Glossed Difficult Words and Key Cohesive Lexical Chains on Iranian EFL Learners’ Reading Comprehension

Abdollah Baradaran, Mehrnoosh Abdulahzadeh

Abstract: The state of the learner’s lexicon plays an essential role in reading comprehension and problems. An increasing amount of research has being done on the interaction of lexical knowledge, background knowledge, and general reading strategies, and on investigating lexical means of improving reading comprehension. The attempt of this study was to investigate and compare the effects of two different pre-reading lists on Iranian EFL learners’ reading comprehension. Therefore, the researcher has selected 60 female intermediate learners based on NELT language proficiency test, from 90 female learners who have studied English for at least two years and have finished elementary and pre-intermediate levels in Mofid language school in Damghan, Semnan province. These 60 subjects were randomly divided into two experimental groups. After the groups proved to be homogenous, the researcher started the treatment by providing subjects of the group A with glosses of difficult words and the subjects of group B with significant lexically cohesive chains in the same text. Finally, the subjects’ mean scores obtained in the achievement test were statistically analyzed by employing a t-test. The result of the analyses revealed the following: glossed difficult words technique did, indeed, have some profound impact on the development of reading comprehension by Iranian EFL learners.

Key words: reading comprehension, glossed difficult words, key cohesive lexical chains.

INTRODUCTION

Traditionally, reading comprehension was believed to mainly entail the learning of vocabulary and the aggregation of meanings (Anderson, 1994) and classic language teaching methodologies therefore concentrated on the teaching of bottom-up (from the page) aspects of comprehension such as word recognition and grammar (Zimmerman, 1997). Teaching methodology then has shifted focus to providing and activating background knowledge through the use of pre-reading activities and advanced organizers (Wallace, 1992), and on encouraging learners to guess meanings and understand from context (Grellet, 1981; Coady, 1993; Nuttall, 1996). Consequently, increased attention is again being paid to the role of vocabulary knowledge in reading comprehension and the teaching of lexis (Lewis, 1993; Coady and Huckin, 1997; Alderson, 2000; Nation, 2001). Alderson, (2000) for example, claims that measures of readers’ vocabulary knowledge routinely correlate highly with measures of reading comprehension, and are often, indeed, the single best predictor of text comprehension.

To assist learners with low vocabularies, then, texts are often modified to increase vocabulary learning and improve reading comprehension. One way this is often done is through the use of highlighting, glosses and definitions. This allows the reader to notice unknown words, which is thought to be the first stage in acquisition (cf. Gass, 1988), (Paribakht and Wesche, 1997). Another way, however, is an intriguing idea involving the use of lexical items in a text in a schematic manner to improve learners’ reading comprehension which seems to have received little attention in the research literature. In the final chapter of his award-winning and authoritative book on lexical cohesion, Patterns of Lexis in Text, Hoey, (1991) suggests that one effective way of providing learners with ‘quicker access to the content of the text’ might be to scan for multiple-linked cohesive items in the text and provide learners with those items before they read the text. This would provide readers with grounding in key topic-related words in the text in effect providing a lexical framework or schema to build their understanding on. A review of the related literature, however, indicates that in the intervening 10 years, Nation, (2001) seems to be the only reading researcher who has even briefly considered Hoey’s idea. Nation calls Hoey’s, (1991) concept ‘insightful’ and notes the ‘striking finding’ in his own research that ‘topic related words’ occur among the very high-frequency words in a text, and that “a brief glance at the most frequent content words in [a frequency-ranked] list is usually sufficient to determine what the text is about” (Nation, 2001).

Statement of the Problem:

Many EFL learners including Iranian language learners seem to fail to learn the meaning of unknown words from reading for several reasons. For example, many readers ignore the presence of unknown words, infer
incorrect meaning of unfamiliar words, or have insufficient contextual clues to guess the word meaning. Ignoring or not paying much attention to some new and efficient strategies can be known as one of the problems in this context.

To solve the above stated problems, several vocabulary studies have been conducted to enhance and simplify word inferring process through vocabulary glosses (Hulstijn, 1992; Hulstijn, et al., 1996; Watanabe, 1997). As noted by Jacobs, Dufon, and Hong, (1994), glosses can be used to enhance reading comprehension as well as vocabulary learning. Nation, (2001) further noted that vocabulary glosses keep reading process uninterrupted, decrease incorrect meaning inferences from context, draw learners’ attention to the unfamiliar words and promote greater use of unsimplified texts that might contain too many difficult words for the readers. Although there may indeed exist various techniques and activities for improving learners’ reading comprehension; the researcher of the present study has focused her attention on common methods of pre-teaching vocabulary (glossed difficult words and key cohesive lexical chains). It seems that, these two types of pre-teaching vocabulary list can be regarded as appropriate, enjoyable, and fruitful means for improving reading comprehension. Thus, the purpose of the present study was to investigate the effect of two pre-reading vocabulary lists on Iranian EFL intermediate learners’ reading comprehension.

In order to achieve the goal of the study, the following research question was raised:
Is there any significant difference between the development of reading comprehension by Iranian EFL intermediate learners receiving glossed difficult words and that of those receiving key cohesive lexical chains?

Based on the aforementioned research question and in order to investigate the posed research question empirically, following null hypothesis was put forward:
There is no significant difference between the development of reading comprehension by Iranian intermediate EFL learners receiving glossed difficult words and that of those receiving key cohesive lexical chains.

Method:
Participants:
As cited, the aim of the present study was to compare the effect of glossed difficult words and key cohesive lexical chains on Iranian EFL learners’ reading comprehension. Therefore, the subjects were selected from the intermediate language learners who enrolled in reading classes of Mofid Language School in Damghan, Semnan province. They had studied English for about 8 semesters. The limited number of language learners at the intermediate level forced the researcher to include all of the available subjects in the study. Therefore, the subject selection was done through convenient method sampling.

Instrumentation:
In order to obtain measurable data with which the results of the present study could be statistically analyzed, two sets of instruments were utilized; Firstly, for the purpose of measuring subjects’ abilities and secondly, for the instruction procedure.

1. Tests:
In order to answer the research question two sets of tests were applied.

1.1. NELT:
A Nelson English Language Test (NELT 200A) was used as a means to homogenize the learners with regard to their language proficiency level. In order to have both a homogeneous sample, and a concrete measurement of the subjects’ language proficiency level, this standard test (NELT), designed for intermediate level students was employed (see Appendix A), (see Table 1 & Figure 1).

1.2. Reading Comprehension Test:
A test of reading comprehension, consisting of 6 general reading passages and 30 items in a multiple choice format; serving both as homogenizing test and achievement test was used as a means to both homogenize the learners in terms of their knowledge of reading comprehension and to assess the reading comprehension ability of the subjects after the treatment. This reading comprehension test was from Effective Reading 2 prepared by Mirhassani, A., Behroozi, P., & Alemi, M., (2008).

2. Instructional Materials:
The researcher taught the course book in both experimental groups.

Select readings textbook (Intermediate) is a reading text for intermediate students of English. In Select Readings, high-interest, authentic reading passages serve as springboards for reading skills development, vocabulary building, language analysis, and thought-provoking discussions and writing. (Linda Lee & Erick Gunderson, 2001)
Procedure:

This experiment was accomplished during regular class periods. The course consisted of 6 weeks and each week included three 75 minute sessions. At the beginning of the study a sample Nelson English Language Test (NELT 200A) was used to homogenize the subjects who were 90 intermediate EFL learners. After the administration of NELT, the mean and standard deviation of test scores were determined by the researcher. Those subjects who scored one standard deviation below and above the mean were considered as subjects of this study. Then the researcher randomly divided those 60 subjects into two groups of 30.

After dividing these 60 subjects into two experimental groups randomly, to make sure that these two groups were homogeneous, the researcher conducted an independent sample t-test between the total scores of the two experimental groups in their reading comprehension test. So the researcher employed the reading comprehension test which was comprised of 6 general reading passages and 30 items in the multiple choice format from Effective Reading 2 textbook prepared by Mirhassani, A., Behroozi, P., & Alemi, M., (2008). This test was piloted with a group of 20 EFL learners of the same Language School with similar characteristics to the targeted group. As the next step, the scores obtained from this test on reading comprehension underwent statistical analyses (see Table 2 & 3).

During the 17 teaching sessions, identical procedures were adopted for both experimental groups. It is worth mentioning that, the researcher taught both groups. Both groups went through the routines of the reading classes. In the beginning of each session both groups were handed out a reading passage (from the Select Readings textbook; prepared by Linda Lee and Erik Gundersen, 2001 Oxford University Press). During the 17 sessions of the treatment 8 reading passages randomly chosen from Select Readings textbook were covered. After each passage, there were some exercises like comprehension questions and true/false exercises.

These passages were administered to subjects of each group: highlighted vocabulary with glosses (group A; n= 30), and highlighted key lexically cohesive links (group B; n= 30). In group A, based on the participants’ level, it was felt that subjects should have little trouble with the majority of the high-frequency words in the text. So, some of those words that were presumed to be lexically problematic were placed in a list at the top of the page and were provided with Persian glosses. The first occurrence of each glossed word in the text was underlined and boldfaced to affect subjects’ attention. In group B, the words making up the key words and connections important to the topic of the passage or (key cohesive lexical chains) were placed in a list at the top of the page with the same format of group A.

At the last session (18th session), the subjects took the reading comprehension achievement test which was the same as the reading comprehension test that was used to homogenize the 60 subjects in terms of their knowledge of reading comprehension. Needless to say, the objective in administering the reading comprehension test after the treatment was to measure the learners’ degree of achievement with regard to reading comprehension that was taught throughout the term (see Table 4). As such, the reading comprehension test administered after the treatment was considered to be an achievement test.

Furthermore, in order to answer the research question a two tailed t-test was employed to test the significance of the difference between the means of the reading comprehension achievement test scores of the two groups with the significance level of 0.05 (see Table 5).

Results:

Owing to the nature of the research question and the aforementioned null hypothesis, the true-experimental design was adopted for the current study.

Accordingly, in this study glossed difficult words and key cohesive lexical chains were independent variables, reading comprehension was the dependent variable, gender and level of proficiency (intermediate) as control variables.

In order to test the null hypothesis, the collected data were analyzed by SPSS program. Considering the nature of the variables and the fact that the researcher was seeking the impact of the independent variable on the dependant variable, independent sample t-test was the appropriate statistical procedure to analyze the data obtained through the reading comprehension test as homogenizing the 60 subjects with regard to reading comprehension ability and the reading comprehension achievement test in this study. Cronbach alpha formula was utilized to estimate the reliability of the Nelson English Language Test (NELT) and the reading comprehension test of the study during the piloting phase. Certain descriptive statistics were also used for the purpose of homogenizing the subjects based on their performances on the Nelson English Language Test (NELT) and based on their knowledge of reading comprehension.

Table 1: Descriptive statistics and reliability index of NELT for the target population.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>V</th>
<th>Cronbach (α)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole population</td>
<td>90</td>
<td>38.14</td>
<td>5.96</td>
<td>35.52</td>
<td>0.88</td>
</tr>
</tbody>
</table>
Table 4: Descriptive statistics of the reading comprehension achievement test.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp. group A</td>
<td>30</td>
<td>26.30</td>
<td>3.09</td>
<td>9.54</td>
</tr>
<tr>
<td>Exp. group B</td>
<td>30</td>
<td>23.86</td>
<td>3.26</td>
<td>10.62</td>
</tr>
</tbody>
</table>

Table 6: The result of t-test for the two experimental groups’ reading comprehension achievement test mean scores.

<table>
<thead>
<tr>
<th>N</th>
<th>t-value</th>
<th>df</th>
<th>t-critical</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>2.96</td>
<td>58</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Note. P < .05

Conclusions:

In order to test the null hypothesis, the achievement test mean values of the two experimental groups had to be compared. Table 4 clearly indicates that the experimental group A’s mean, i.e., 26.30 is higher than that of the experimental group B’s mean value of 23.86. However, as Best and Kahn, (1989) have rightly stated, “a mere quantitative superiority of the experimental group mean score over the control group mean score is not conclusive proof of its superiority”. Therefore, in order to determine whether the differences between the calculated means of the two experimental groups are statistically significant or not the researcher had to employ a t-test.

Based on the foregoing arguments and to further ensure the safety and accuracy of the present research, the mean scores of the two experimental groups were subjected to a t-test. The result of the t-test is presented in table 6.

According to the above table, the t-value of 2.96 exceeds the t-critical value of 2.00 at 58 degrees of freedom and at 0.05 level of significance, meaning that the difference between sample means was large enough to be attributed to the treatment provided by the researcher. In the light of this argument, the null hypothesis was rejected. Therefore, it may be concluded that glossed difficult words does, indeed, contribute to the development of reading comprehension by Iranian EFL learners; and that it is a more effective teaching technique than the key cohesive lexical chains.

This study aimed at determining the effect of pre-reading vocabulary lists, (glossed difficult words and key cohesive lexical chains) on Iranian EFL learners’ reading comprehension. Furthermore, it set out to determine whether there existed a significant difference between teaching vocabulary through a traditional technique, such as glossed difficult words or by means of key cohesive lexical chains - key words and connections important to the topic of the text. Therefore, the present research mainly aimed at conducting a comparative study of the effect of two different kinds of treatment, i.e. glossed difficult words and key cohesive lexical chains on Iranian, EFL, intermediate learners’ reading comprehension. The results of the study revealed the following:

There was a statistically significant difference between the reading comprehension achievement test mean scores of the learners in the experimental group A, who received glossed difficult words and that of those in the experimental group B, who received key cohesive lexical chains. As such, it was concluded that the experimental group A, had outperformed the experimental group B, in the reading comprehension achievement test. This finding led to the rejection of the null hypothesis.

The above mentioned finding seems to support the argument that glossed difficult words can have some profound impact on the development of reading comprehension; whereas, employing key cohesive lexical chains technique can have far less effect on the reading comprehension.

In summary, then, it can be conclusively said that this study has shown a significant positive effect of glossing on intermediate learners’ English reading comprehension, as measured by multiple choice questions, while results on the effects of providing lexical cohesive chains on learner’s English reading comprehension are inconclusive. It may also be that providing glosses for difficult words which would otherwise need to be guessed or ignored has a positive influence on subjects’ reading comprehension.

During any study, many unanswered questions arise which in turn deserve investigating. This study is not an exception. So the following lines are suggestions for further study.

1) There are many extraneous factors that should be further controlled in future research, such as reading strategies applied by learners. It should also be noted that the intermediate proficiency level of the subjects may be a factor as well. Teachers who adopt glossed difficult words might need to enhance students’ lexical memory in regular reviews or in combination of elaborative tasks on unknown words. In short, further research may extend the time intervals among recall tests to observe the difference between both effects of the glossed difficult words and key cohesive lexical chain. The limitation of the current study such as reading design and extraneous factors offer some suggestions for future studies with more careful control. It is also possible that repeating the study with subjects at a higher level of reading proficiency may result in better performance in the cohesive links group, and may lead to an indication that different methods of reading instruction are appropriate at different levels of proficiency.

2) Any replication should attempt to use a larger sample population, which may have affected the reliability of the results. This study was done on Iranian learners that English is their foreign language; it is possible to do it on the learners of other countries.
3) Considering the fact that this study was limited to only female EFL learners, it is suggested that similar studies could be conducted with other participants including male or male and female ones.

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