The Effect of Two Pre-task Activities: Pre-taught Vocabulary and Brainstorming on Intermediate EFL Learners’ Reading Comprehension

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ABSTRACT

The primary purpose of the present study was to investigate the effectiveness of two pre-task activities of reading: pre-taught vocabulary and brainstorming in EFL learners’ reading comprehension. To this end, three intact classes in a private English Institute in Tehran, were selected from a population of 60 English learners. Based on their scores on Oxford Placement Test (OPT), the students were randomly assigned into two experimental groups and one control group and a pre-test was run at the beginning of the course. At outset of the course a pre-test was run among three groups. The researcher instructed the experimental groups in 16 weeks, one session a week and lasting 40 minutes in each session. The first experimental group benefited from pre-taught vocabulary, while the second experimental group benefited from brainstorming as a pre-task and the third group did not receive any pre-task activities in the reading class. At the end of the course, a post-test with the same items of the pre-test was run to determine the improvement of EFL intermediate students’ reading comprehension changes and an attitude questionnaire was planned to determine the learners’ attitudes toward the pre-task activities. The results of paired sample t-test indicated that the use of pre-taught vocabulary and also brainstorming enhanced the scores of the first experimental and second experimental groups’ post-tests; moreover, ANOVA results revealed a significant increase in reading comprehension scores of the first and the second experimental groups’ post-tests compared to the control group’ post-test scores. The results of attitude questionnaire demonstrated the pupils’ positive attitudes toward the use of pre-task activities.

Key words: Reading Comprehension Ability, Pre-task Reading Activities, Pre-taught Vocabulary, Brainstorming

The first pre-task activity administered in the present study is pre-taught vocabulary. Vocabulary plays an important role for language comprehension. There is a complicated and dynamic relationship between the amount of vocabulary knowledge and degree of reading comprehension ability (Shen, 2008). Cheng and Good (2009) proved that teaching vocabulary before reading plays a significant role on the learners’ comprehension. Based on Pardo (2004), if a text has too many unknown words, the readers will face difficulty in understanding the passage. The second pre-task activity that was used in this study was brainstorming. Almutairi (2015) claimed that for activating learners’ background knowledge, teachers can utilize different strategies like brainstorming; which welcomes all learners’ various experiences and viewpoints. Hong-qin (2007) stated that introducing a new topic, making students recall their personal experiences or background knowledge, and brainstorming helps learners to comprehend a text better. Based on Keshwan (2014), brainstorming as a strategy makes learners more capable to generate ideas and promote their self-confidence. This study focuses on examining the effect of two pre-task activities:
pre-taught vocabulary or brainstorming on Iranian intermediate English learners’ reading comprehension.

REVIEW OF LITERATURE

Pre-task activity has a major function in making learners aware of the aims of a task. Teachers use pre-tasks in order to simplify the target tasks which stimulate the learners’ schema or prior knowledge to perform a task in the more limited time and like native speakers (Long & Blackwell, 2015). Mao (2012) believed that the aim of pre-task is arousing the learners’ schematic knowledge and making them to be more interested to a text.

Based on Yusuf (2011), pre-tasks aim to prepare readers for dealing with difficult linguistic items in a text, and attract their attentions to conceptual and cultural aspects of a text. Navaee and Asadi (2015) said pre-task reading activities like brainstorming can make learners more interested in reading a text.

The use of pre-task activities provides enough chance for the learners to encounter with the new topic and cultural differences. Mao emphasized on the main role of pre-tasks and said, “The tasks given at this stage will usually enable the learners to engage in active purposeful interaction which will fan their readers to read the text” (2012, p. 2437). Pre-task as the first phase of task-based instruction creates an image of task and make them aware of what they want to do in the next phase.

Different Types of Pre-task Activities

There are different types of pre-task activities which activate students’ participations. Yusuf (2011) classified pre-tasks into three groups: previewing activities, pre-reading discussion through group work and brainstorming. Appleman and Graves (2012) suggested different activities for pre-task reading activities such as: linking a text to the learners’ real life, stimulating the learners’ background knowledge or schema, pre-teaching vocabularies of the text, considering the literary features of the text like genres, setting, plot and pre-questioning, predicting and setting direction. Ajideh (2003) said that pre-reading tasks include explaining the syntactic structure or word definitions to help learners to interpret and comprehend a text better. Pardo (2004) said that teaching vocabulary words through pre-tasks prevents students from spending too much time on understanding words to read a text, so teachers should provide learners the meaning of unknown words in order to connect the new data to their previous knowledge.

Pre-taught vocabulary as a pre-task activity

One of the most noticeable challenges that learners will confront in reading comprehension is lack of sufficient linguistic knowledge like word recognition; if they master how to decode a few words automatically, they will be able to infer the groups of familiar words (Spenser & Hay -(1998)-, cited in Alyousef, 2006).

Cisco and Padron stated about the noticeable effect of vocabulary on understanding a language, they said, "By frontloading or explaining unknown words or concepts in a language they understand, student can develop a deep understanding of the concepts while they are still learning the English words" (2012, p. 9). Shen said that, “The instrumentalist view sees vocabulary knowledge as being a major prerequisite and causative factor in comprehension. Good vocabulary knowledge enables good comprehension” (2008, p.135). Cheng and Good (2009) proved that teaching vocabulary before reading plays a significant role on the learners’ comprehension. Therefore, teachers should benefit from effective means to teach new vocabularies to the students before they read a text.

Brainstorming as a pre-task activity

Brainstorming is a strategy that prepares a suitable atmosphere for the learners to take part in a discussion freely. It also provides all the learners with equal opportunity to participate in the group discussions in order to creatively find a solution to the problem at hand (Almutairi, 2015). Brainstorming as a technique emphasizes on the role of learners’ background knowledge. Keshwan explained the benefits of brainstorming, “It is largely due to the fact that brainstorming and simulation games not only stimulates student’s attention but also interests them to participate in the class in an interactive and fun-active manner” (2014, p. 1). Almutairi said that, “Brainstorming combines a relaxed, informal approach to problem solving with lateral thinking. It encourages people to come up with thoughts and ideas that can, at first, seems a bit crazy ”(2015, p.137). Teachers have very effective roles in arousing learners’ background knowledge through brainstorming, they have to introduce the key words that relate to the learners’ previous knowledge.

METHODOLOGY

Method and Design

Both quantitative and qualitative measures were used in the present study. The data set included the participants’ answers to the questions in the three short stories in the same pre- and post-tests. The records of the participants’ attitudes toward the use of pre-task were gained from an attitude questionnaire. In this study, the learners’ reading comprehension ability was quantitatively measured. For the purpose of finding out the impact of pre-task, a series of paired sample t-tests and one-way ANOVA were run using Statistical Package of Social Science, (SPSS) version 23. To fulfill the final aim of the study which was finding students’ attitude toward pre-reading task activities, frequency counts and percentages were used in order to analyze the results of the participants’ attitude questionnaire.

Participants

The participants of the study were selected through non-probability sampling. Three intact classes were selected and randomly assigned as two experimental groups and one control group. The learners were both males and females
aged between 13-17 who were in low intermediate level. They had enrolled in English language classes at a private institute in the Fall.

**Materials and Instruments**

Two lesson plans were planned for the two experimental groups and one set of lesson plan planned for the control group. In addition, two sets of questionnaires were constructed for the two experimental groups. The major instruments used during this research included: Oxford placement test (quick placement test) which proved the homogeneity of the subjects, teaching models, a pilot test and two reading comprehension tests with the same items (pre- and post- tests) and questionnaires which were set to distribute among the students in the two experimental groups.

**Procedure**

As a starting point, 60 students took a placement test. Among 60 students, the researcher chose 30 subjects to take part in the study. After ensuring the homogeneity of the participating students, they were randomly assigned into three groups; two groups served as the experimental groups who received the treatment and one as a control group who did not benefit from any treatment. One week before the treatment, a pilot test was conducted among 12 students at the same level. The researcher instructed the experimental groups in 16 weeks, one session a week and lasting 40 minutes in each session. The instructor designed three types of lesson plans; two lesson plans included pre- task activities, whereas the third lesson plan which was used for the third group did not include any pre- task activities, and it was a conventional form of lesson plan. In implementing the pre-taught vocabulary, the researcher taught the meaning of unknown words in L2. In implementation of brainstorming, which was given to the second group, the researcher wrote the key words or concepts on the board and encouraged the learners to express their opinions freely. The pre-task phase was performed in 5-10 minutes before reading a text and while-task was done in 10-15 min and post-task was done in 10-15 minute. The students were asked to answer the reading comprehension questions and exercises after doing some pre- task activities in L2 based on their understanding of the reading passage. In other words, the students were assigned to answer 20 questions for the three reading texts. In post-test, the two experimental groups were given the same reading material and reading comprehension questions. After administrating post-test in the two experimental groups, an attitude questionnaire was distributed among the learners to determine their perception toward pre- task activities.

**Data Analysis**

The researcher employed two paired sample t- test and one- way ANOVA to confirm the positive effect of both pre- task activities including pre- taught vocabulary and brainstorming on EFL intermediate learners’ reading comprehension. The schematic representation of the design of the study is as follows:

The first experimental group’s pre- and post- test scores were compared through paired sample t- test. The second experimental group’s pre- and post- test scores were also compared through paired sample t- test. The first and the second experimental groups’ post- test scores were compared with the third group’s post- test scores through one- way ANOVA. The researcher also employed an attitude questionnaire to investigate the learners’ attitude toward the use of the pre- task activities. The percentage and frequencies of scores were regarded.

G1= experimental group 1  
G2= experimental group 2  
G3= control group  
T1= pre- test  
T2= post- test.

**RESULTS AND DISCUSSION**

Table 1 expresses descriptive statistics including group size, Mean, Standard deviation, Standard error of the mean, etc, performances of the learners in the pre- and post- tests of reading comprehension.

Table 2 demonstrates the results of paired sample t- test ran for the purpose of examining differences between the mean of scores of the learners in the first experimental group prior to and after using pre- taught vocabulary as a pre-task reading.

As shown in the table, at the assumed alpha level of 0.05 there is a statistically difference in the performance of the learners in the first experimental group before and after the treatment. To put it most specifically, based on the results of pre- and post- tests, the p- value is 0.05 (p <.05). As indicated in the table, the performance of the learners in the first experimental group significantly improved after use of pre- taught vocabulary. Therefore, the first null hypothesis can be safely rejected.

Table 3 indicates the results of paired sample t- test for comparing the mean differences of scores obtained by the second experimental group prior to and after using brainstorming as a pre-task reading activity.

As obvious in the table, at the assumed alpha level of 0.05, there is a significant difference in the reading comprehension scores of the learners after using brainstorming as a pre- task reading activity. Based on the above table, the p- value is .029 (p <.05). As a result, there is a statistically difference between the scores of the learners in the second experimental group prior to and after the use of brainstorming as a pre- task.

Table 4 shows the results of paired sample t- test for comparing the mean differences of scores gained by the third group in pre- and post-post tests.

As obvious in the table, at the assumed alpha level of.05, there is not a significantly difference between the third group’s pre- and post-tests scores. Based on the above table, the p- value is 0.168 (p>.05). It can be concluded that the third group’s performance did not change in pre- and
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The main aim of the study was to compare three means obtained from the first and second experimental groups and the third control group, one way ANOVA test was used for the statistical analyses of the data both in the pre- and post-tests.

The post-test and their scores were more or less at the same level before and after the study.

The main aim of the study was to compare three means obtained from the first and second experimental groups and the third control group, one way ANOVA test was used for the statistical analyses of the data both in the pre- and post-tests.

Table 1. Descriptive statistics of the performances of the three groups

<table>
<thead>
<tr>
<th></th>
<th>Pre g1</th>
<th>Post g1</th>
<th>Pre g2</th>
<th>Post g2</th>
<th>Pre g3</th>
<th>Post g3</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
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<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Missing</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Mean</td>
<td>11.20</td>
<td>16.50</td>
<td>13.00</td>
<td>15.60</td>
<td>12.50</td>
<td>11.90</td>
</tr>
<tr>
<td>Standard error of mean</td>
<td>0.998</td>
<td>0.543</td>
<td>0.789</td>
<td>0.777</td>
<td>0.601</td>
<td>0.567</td>
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<tr>
<td>Median</td>
<td>11.50</td>
<td>16.50</td>
<td>13.00</td>
<td>16.00</td>
<td>12.50</td>
<td>11.50</td>
</tr>
<tr>
<td>Mode</td>
<td>12</td>
<td>16</td>
<td>13</td>
<td>16</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>3.155</td>
<td>1.716</td>
<td>2.494</td>
<td>2.459</td>
<td>1.900</td>
<td>1.792</td>
</tr>
<tr>
<td>Variance</td>
<td>9.956</td>
<td>2.944</td>
<td>6.222</td>
<td>6.044</td>
<td>3.611</td>
<td>3.211</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.169</td>
<td>−0.660</td>
<td>−0.054</td>
<td>−1.160</td>
<td>0.304</td>
<td>1.344</td>
</tr>
<tr>
<td>Standard error of skewness</td>
<td>0.687</td>
<td>0.678</td>
<td>0.678</td>
<td>0.687</td>
<td>0.687</td>
<td>0.687</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.210</td>
<td>0.812</td>
<td>−0.438</td>
<td>2.596</td>
<td>−0.262</td>
<td>2.297</td>
</tr>
<tr>
<td>Range</td>
<td>11</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>6</td>
<td>6</td>
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<td>Minimum</td>
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<td>13</td>
<td>9</td>
<td>10</td>
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<tr>
<td>Maximum</td>
<td>17</td>
<td>19</td>
<td>17</td>
<td>19</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 2. Results of paired samples T-test for the first experimental group

<table>
<thead>
<tr>
<th>Paired differences</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Standard deviation</td>
<td>Standard error mean</td>
<td>95% confidence interval of the difference</td>
</tr>
<tr>
<td>Pair test1 - post test1</td>
<td>−5.300</td>
<td>4.523</td>
<td>1.430</td>
</tr>
</tbody>
</table>

Table 3. Results of samples T-test for the second experimental group

<table>
<thead>
<tr>
<th>Paired differences</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Standard deviation</td>
<td>Standard error mean</td>
<td>95% confidence interval of the difference</td>
</tr>
<tr>
<td>Pair 1</td>
<td>−2.600</td>
<td>3.169</td>
<td>1.002</td>
</tr>
</tbody>
</table>

Table 5 illustrates the results of ANOVA test for the comparison of three groups’ pre-test of the reading comprehension ability.

As shown in the Table 5, the performances of the both first and second experimental groups and the third group in terms of reading comprehension ability were not significantly
different in the pre-test. More specifically, there were not significantly difference among three groups’ reading comprehension scores (sig=.287, F= 1.309, p>.05) at the outset of the study.

Table 6 expresses the results obtained from the analyses of the reading tests scores gained by the first and second experimental groups and the third group in the post-test.

Table 6 indicates that at the assumed alpha level of 0.05, there is a statistically difference among the two experimental groups and the third group in the post-test of reading comprehension (sig=.00, F= 14.61, p<.005).

Table 7 demonstrates the frequency and percentage of students’ replies to the items in the questionnaire. The table shows the results of the students’ attitudes toward the use of pre-task activities in reading.

Table 4 shows that the subjects were highly satisfied with the pre-task activities administered. Based on the table above, 40 percent of the learners were moderately satisfied and 60 percent of them were most satisfied; whereas none of them were slightly satisfied. The results indicate that the learners in both first and second experimental groups had high level of satisfaction toward the use of pre-task activities. Therefore, the learners had positive attitudes toward the two types of pre-task activities.

CONCLUSION

Brainstorming and pre-taught vocabulary as two strategies assists learners to overcome reading comprehension challenges. Using brainstorming before reading a text, make learners more encouraged to read a text and feel less concerned and presenting unknown words before reading a text, can improve the learners’ reading comprehension abilities and enable them to answer reading comprehension questions easily.

In this study, the researcher tried to find the effect of pre-task reading activities and her aim was to know if these strategies have any effect on improving the learners’ reading comprehension abilities or not. In the same vein, the researcher used ANOVA measurement. Analysis of the participants’ reading comprehension scores in the pre and post-test revealed that the students in both first and second groups exposed to the use of pre-reading activities outperformed the third group who read the texts without experiencing pre-task reading activities. The result of ANOVA indicated that the learners’ reading comprehension ability can be improved through applying both pre-reading activities: pre-taught vocabulary and brainstorming.

In this study, the learners seemed enthusiastic to know the unknown words before reading a text, in order to help them to understand a text better and answer the questions. Furthermore, it was found that students liked to read a text by catering their previous knowledge and sharing their ideas with the class through brainstorming.

The present study has some limitations which are explained below. Firstly, the scope of this study cannot be generalized to all foreign language context due to small number of the participants. The study was carried out at an English institute in Tehran with the total number of 30 students. Therefore, the results of the study may not be generalized to all foreign language institutes in the context of Iran. Secondly, the findings of the study are based on the impact of pre-task reading activities. So, this study only took one skill (reading) into account. Therefore, additional research is crucial and needed to focus especially on the effect of pre-task activities in the foreign language classroom in all language skills.
Moreover, for the purpose of narrowing down the scope of the study and controlling the extraneous variables, a number of delimitations were incorporated by the researcher. First, it was tried to focus only on the impact of one linguistic item, i.e. vocabulary on reading comprehension. Secondly, only students at low intermediate level with similar educational backgrounds were selected as the participants of the study. Finally, it was tried to randomly assign students to the control and the experimental groups.

REFERENCES


