The Effect of Teacher-Versus Peer-Mediated Dynamic Assessment Instruction on Iranian EFL Learners’ Vocabulary Learning

Firooz Sadighi
Department of Foreign Languages
Shiraz Branch, Islamic Azad University
Shiraz, Iran
Email: Firoozsadighi@yahoo.com

Fatemeh Jamasbi*
Department of Foreign Languages
Shiraz Branch, Islamic Azad University
Shiraz, Iran
Email: Jamasbifatemeh@gmail.com

Abstract. Based on sociocultural theory, learning and development are inextricably connected. The present study aimed to explore the applicability of Teacher-Dynamic Assessment (Teacher-DA) versus Peer-Dynamic Assessment (Peer-DA) on Iranian EFL learners’ reading vocabulary learning. To this aim, two intact classes of 40 female intermediate EFL students were assigned to the experimental group 1 (learning new words through teacher-mediation) and experimental group 2 (learning new words through peer-mediation). A vocabulary test based on Vocabulary Knowledge Scale (VKS) was used both as pre- and post-tests. In both classes interventionist Dynamic Assessment-sandwich format was used. The results of statistical analysis obtained from independent sample t-test and paired sample t-test revealed that though both peer and teacher mediation could improve students’ vocabulary learning during the course of instruction, peer mediation proved to be more effective on the learners’ reading vocabulary learning. By audio recording experimental class 2, the extent of collaboration that occurred with each group was determined.

Keywords: Dynamic assessment, vocabulary learning, teacher mediation, peer mediation
1. Introduction

While the traditional way of assessment, called Static Assessment (SA), mainly focuses on the final product of teaching and learning procedures, Dynamic Assessment (DA) based on Vygotsky (1978) and his colleagues’ framework (Feuerstein, Falik, & Feuerstein, 2003; Feuerstein, Rand, & Hoffman, 1979), emphasizes the use of instruction and assessment simultaneously (Lidz, 1987). The process but not the final product of learning and responding are backbones of Dynamic Assessment (DA). As one way of achieving this ideal form of education, a mediator or mediators (teachers, peers, and parents) provide necessary assistance for the learner and at the same time they consider the learner’s capabilities (Lantolf & Pohner, 2004; Lidz & Gindis, 2003). Lantolf and Thorne (2006) note that mediation is ‘the process through which humans deploy culturally constructed artifacts, concepts and activities to regulate the material world or their own and each other’s social and mental activity’ (p.79). Therefore, through mediation a kind of interaction between the learner and the mediator takes place. Lantolf (2000) points out that each individual does not interact directly with the environment and instead he or she uses culturally designed tools and artifacts which are designed and created by human beings over time. Considering the differences between Dynamic Assessment (DA) and Static Assessment (SA) is of great importance since they can distinguish between an average (static) way of the instructional process and an excellent (dynamic) one. Pohner and Lantolf (2003) believed that the concept of “future” makes a distinction between Dynamic Assessment (DA) and Static Assessment (SA). Based on Vygotsky’s (1978) viewpoints and DA principles, the future performance of the learner (potential level) is quite different from his/her current level of development. This is in line with learning issues where DA mainly focuses on the gradual processes of learning and development. In this case Some critics like Pohner and Lantolf (2005) and Torrance and Pryor (1998) note that traditional forms of assessment (Static) lack what is called the relationship between assessment and learning.

The authors in this study try to base their study on one of the major concepts of dynamic assessment, mediation, and explore possible effects
of peer mediation versus teacher mediation on reading vocabulary of intermediate students.

2. Literature Review

2.1 Sociocultural theory (SCT), the zone of proximal development (ZPD), and mediation

Sociocultural Theory (SCT) based on the work of Russian psychologist, Vygotsky and his colleagues, considers two main concepts of teacher-versus peer-mediated instruction. Ratner (2002) notes that SCT emphasizes the mediated process of individual functioning organized by factors like: culturally designed tools, behaviors, and notions. Lantolf (2000) points out that based on SCT framework each individual does not interact directly with the environment and instead uses culturally designed artifacts that are designed and created by human beings over time. A pivot part of Vygotsky’s SCT is the concept of the zone of proximal development (ZPD). Based on Vygotsky’s (1978) definition, ZPD is the distance between the current level of an individual’s level of development as attained through problem-solving independently and the actual level of development through interaction with more knowledgeable ones. Therefore, it is supposed that the developmental aspect of human beings is mediated by others. Lantolf and Thorne (2006) note that the SCT defines mediation as ‘the process through which humans deploy culturally constructed artifacts, concepts and activities to regulate the material world or their own and each other’s social and mental activity’ (p.79). Lantolf (2001) believes that mediated higher forms of human mental processes can be supposed as the pivot concept of Sociocultural Theory (SCT). Vygotsky (1986) argued that as human beings we use different physical and symbolic tools to mediate and regulate our interaction with other people and with ourselves.

2.2 Dynamic assessment (DA) and static assessment

Historically, there are two forms of assessment: formative and summative. According to Bachman (1990) summative assessments are held at the end of the instructional period to see the final product of the learning process whereas formative assessments are held before completion of
a course. Both of these assessment techniques emphasize the outcome of learning. Such traditional forms of assessment lack what is called the mutual relationship between assessment and learning. These forms regard instruction and assessment as separate entities (Lantolf & Pohner, 2004; Torrance & Pryor, 1998). Lack of relationship between assessment and learning led Sternberg and Grigerenko (2002) to have a fundamental change in the forms of assessments to integrate instruction and assessment into a unified entity. Apart from traditional ways of assessment, dynamic assessment (DA) which lies in the work Vygotsky (1978) and his colleagues (Feuerstein, Falik, & Feuerstein, 2003; Feuerstein, Rand, & Hoffman, 1979) is built upon the notion that instruction and assessment occur simultaneously. In DA a mediator (teacher or peer) assists the learner while simultaneously examining the learner’s abilities (Lantolf & Pohner, 2004; Lidz & Gindis, 2003). Considering the differences between dynamic assessment (DA) and what is called static assessment (SA) is of great importance. Pohner and Lantolf (2003) believed that the concept of the future makes a distinction between dynamic assessment and static assessment.

Based on DA future performance of the learner (potential level) is quite different from his/her current level of development. This is in line with learning issues where DA mainly focuses on the processes of learning and development while SA emphasizes the final product of learning mainly in the form of summative assessments (Lantolf & Pohner, 2004; Lidz & Gindis, 2003).

According to Sternberg and Grigerenko (2002) mediated assistance is another feature that distinguishes DA from SA. This kind of mediation has two forms: sandwich and cake. The sandwich form includes three stages: pre-test, mediation, and post-test. Sternberg and Grigerenko (2002) mention that the issues used for pre-tests and post-tests tasks should be in the ZPD, and creating optimal ZPD should be the goal of the mediator (teacher or peers). The cake format comprises feedback on the part of the examiner during the test administration. If the learner cannot accomplish the task given by the examiner, she/he will be mediated in the form of pre-fabricated hints and prompts (Sternberg & Grigorenkoo, 2002, p.27).
2.3 Peer and teacher assisted mediation
Vygotsky (1986) believes that language is the most significant tool for mediation and mediates individual developmental processes through what is called the process of internalization. The concept of mediation makes Dynamic Assessment (DA) quite different from traditional assessment. According to Tharp and Gallimore (1991) to help learners develop their hidden abilities and move toward their ZPD, mediation will be presented contingently. Aljaafreh and Lantolf (1994) present three ideal conditions for mediation. First, mediation should be graduated so that the mediator (teacher or peer) can provide help in the form of different prompts, hints, questions, gestures, or clear explanations. These forms of mediation should start from the most implicit to the most explicit ones. Second, mediation should be contingent and should be offered whenever it is needed. Third, mediation should be dialogic in the form of a dialogue between the teacher or peer and the learner. Based on Lantolf and Pohner’s (2004) classification, there are also two forms of dynamic assessment called interventionist and interactionist. Lantolf and Pohner (2004) note some differences between these two forms; the interventionist emphasizes the efficiency of learning and speed but the interactionist related to the ZPD, focuses on the interaction between a learner and a mediator. According to Haywood & lidz (2007), all elements in interventionist DA are pre-scripted while in interactionist DA the role of mediator in the process of learning becomes crucial. It seems that there is no significant difference between peer and teacher assisted mediation in using different forms of mediation. The only difference is that trained peers should take the role of the mediator (Budoff, 1987; Campione, Brown & Ferrera, 1984; Carlson & Wiedl, 1992).

2.4 An overview of related research studies
Based on Dynamic Assessment (DA), to promote learner’s development, teacher or peer mediation is supposed as effective ways in L2 research and context. Inspection of the literature on Dynamic Assessment (DA) and mediation shows the effectiveness of mediation in learning different skills and sub-skills of English. Antn (2003) reported the usefulness of DA in testing the language proficiency of advanced L2 learners. The
learners were provided with different prompts (mediation) through dialogic teacher-learner interactions. The results of the study also indicated that the inclusion of mediation increased the test’s ability of learner’s writing and speaking skills. Shamir and Steven (2005) conducted a study to see the influence of peer mediation on the autonomy behavior of children. The results showed that children who received peer mediation outperformed children who didn’t receive mediation. Also, this kind of autonomy was associated with higher cognitive modifiability. On the effects of DA on improving L2 French learners’ listening comprehension in university-level, Ableeva (2008) conducted a research study showing learners’ better comprehension abilities directly related to mediator assistance. Lantolf and Poehner’s (2011) study showed the positive effect of DA in the fourth and fifth-grade Spanish classrooms. In this study, the mediator (teacher) used organized mediation prompts to assess noun/adjective agreement in Spanish. Regarding reading comprehension, Mardani and Tavakoli (2011) examined the influence of mediation on reading comprehension of 30 Iranian male learners. The null hypothesis of the research was rejected and they found out that using DA as a supplementary issue to standard testing had positive outcomes on both test performance and learners’ development. Sadeghi and Khanahmadi (2011) investigated the role of DA based versus non-DA based activities in learning L2 grammar of Iranian EFL learners. The results mainly showed that the type of instruction based on DA (mediation) made a meaningful difference in the learning of grammar by Iranian EFL learners. The use of teacher mediation conducted by Shrestha and Coffin (2012) was within a DA framework to assist business students in open and distance educational contexts. The study revealed the role and positive effect of teacher mediation in the context of academic writing development among undergraduate business students studied in open and distance learning, following the DA. Improvements in English Language Training (ELT) of university students regarding reading comprehension was another research conducted by Naeini and Duvali (2012). The results indicated significant progress in participants’ reading comprehension performance. On the role of Dynamic Assessment (DA) in the vocabulary learning of Iranian EFL learners, research studies have demon-
strated the effectiveness of mediation (teacher or peer) on vocabulary learning procedure (e.g., Ghaderi & Hessamy 2014; Rezayat & Bavali 2016). Research studies by Davin (2013), Yakisik and Cakir (2017) also proved the effectiveness of applying Dynamic assessment (teacher or peer mediation) into speaking abilities. To summarize, a brief overview of a few studies done in the area of Dynamic Assessment (DA) especially in educational context reveals the usefulness of this approach in helping learners to achieve higher levels of learning. Although there are series of studies whose concern is mainly about the effect of peer collaboration versus teacher mediation on the writing performance of L2 learners, (e.g., Shrestha & Coffin, 2012; Alemi, 2015; Hashemnezhad & Fatollahzadeh, 2015; Sadek, 2015; Mauludin & Ardianti 2017), little research exists examining the role of mediation through dynamic assessment (peer versus teacher mediation) in teaching EFL reading vocabulary. In line with the previous studies using Dynamic Assessment (DA) mainly in teaching reading and vocabulary (e.g., Moradi & Tavakoli, 2011; Naeini & Duvali, 2012; Ghaderi & Hessamya, 2014; Rezayat & Bavali, 2016), this study aims to explore possible effects of peer mediation versus teacher mediation on reading vocabulary of intermediate students.

To achieve this goal the following research questions are posed:

1. Does dynamic assessment through teacher-mediation have a statistically significant effect on Iranian EFL learners’ reading vocabulary learning?

2. Does dynamic assessment through peer-mediation have a statistically significant effect on Iranian EFL learners’ reading vocabulary learning?

3. Is there a statistically significant difference between the effects of using dynamic assessment through teacher-mediation vs. peer-mediation on Iranian EFL learners’ reading vocabulary learning?

3. Method of the Study

3.1 Design of the study
The present research applied both quantitative and qualitative analysis. The quantitative data was gathered based on a vocabulary test
according to Vocabulary Knowledge Scale (VKS) which was used both as pre- and post-tests. This study which was a “pretest-posttest control-group design” benefited the use of SPSS and the data of this study was analyzed through the SPSS statistical package. The qualitative aspect of the present study was obtained via a microgenetic analysis of all students’ interactions which were recorded and transcribed.

3.2 Setting and participants
The study was conducted with 40 female intermediate EFL students ranging in age from 15 to 18. They were all native speakers of Persian studying in one of the language institutes in Shiraz during spring of 2018. The sample was not randomly assigned to groups rather the intact classes were used. One of the classes was assigned to the experimental group 1 (N=20) and the other to the experimental group 2 (N=20). The size of each class was the same to fulfill the purpose of balanced design in research. The study was carried out for five sessions for each group during which the experimental group 1 received teacher mediation as the treatment, but the experimental group 2 received peer mediation. A vocabulary pretest was given to both groups to check the homogeneity of the students and to confirm that the selected vocabulary items were unknown to the students. One of the researchers was the instructor of the English course and the performer of the study. For experimental group 2, the students were divided into five groups of four, based on their proficiency level and their teacher’s recommendations (as recommended by Leeser, 2004). Each group consisted of one low, two medium, and one high performing students. The high performing students were considered as peer mediators (N=5) and low and medium ones as mediatees (N15).

3.3 Instrumentation and materials
The employed materials consisted of five short reading passages in line with their proficiency level selected randomly from an authentic source, the Internet site www.ngllife.com (Appendix 1, just one of the five passages). The participants were already placed at intermediate level by the institution, but to ensure the homogeneity of the groups, especially in terms of vocabulary knowledge, at the start of the study a 40-item vocabulary test was designed as a pre-test. But after a pilot study some
items were revised and 10 of them were omitted. The same test was used as a post-test to measure the influence of the treatment on the participants (Appendix 2). A vocabulary test based on Vocabulary Knowledge Scale (VKS) was used both as pre- and post-test. Regarding the reliability of the test, Cronbach Alpha was computed using SPSS 19. The reliability was 0.89.

VKS is a generic instrument, in the sense that it can be used to measure any set of words (Wesche and Paribakht, 1996). VKS has five levels:

I. I don’t remember having seen this word before.
II. I have seen this word before, but I don’t know what it means.
III. I have seen this word before, and I think it means .......... (synonym or translation)
IV. I know this word. It means .......... (Synonym or translation)
V. I can use the word in a sentence: ..........(If you do this, please also do section IV.)

The scale ratings range from 1 to 5, which 1 represents a complete unfamiliarity with the new word while 5 shows their ability to use it efficiently in a sentence. To score both pre- and post-tests, the VKS scoring categories (Wasche and Paribakht, 1996:30) as presented in figure 1 were used.

<table>
<thead>
<tr>
<th>Self-report categories</th>
<th>Possible Scores</th>
<th>Meaning of scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>1</td>
<td>The word is not familiar at all.</td>
</tr>
<tr>
<td>II.</td>
<td>2</td>
<td>The word is familiar but its meaning is not known.</td>
</tr>
<tr>
<td>III.</td>
<td>3</td>
<td>A correct synonym or translation is given.</td>
</tr>
<tr>
<td>IV.</td>
<td>4</td>
<td>The word is used with semantic appropriateness in a sentence.</td>
</tr>
<tr>
<td>V.</td>
<td>5</td>
<td>The word is used with semantic appropriateness and grammatical accuracy in a sentence.</td>
</tr>
</tbody>
</table>

Figure 1. VKS scoring categories: Meaning of scores (Wasche and Paribakht, 1996:30)

Another instrument was audio recording used in experimental class 2 to determine the extent of collaboration that occurred with each group. All
interactions occurred among the students were recorded; a number of them were transcribed carefully, and analyzed to see how the students assisted one another during working on the passages. The transcripts were divided into language-related episodes (LREs; Swain & Lapkin, 1998).

3.4 Procedures

Before implementing the meditational sessions in each group, a 30-item vocabulary test based on VKS was administered as the pre-test to both groups. All 30 words were extracted from 5 short reading passages. The words which the participants rated 1 or 2 in VKS were considered as unknown words. The scores obtained indicated that the participants of the study were homogeneous.

Then the new words were taught in five treatment sessions. Each session lasted 40 minutes, met twice a week. Every session in both classes, a reading passage was distributed among the participants. After allocating ten minutes for the participants’ silent reading of the passage in which five or six target words were highlighted, dynamic assessment was applied. In both classes interventionist Dynamic Assessment-sandwich format was used. The participants of both experimental groups underwent a type of DA procedure during the intervention phase named Cumulative Group DA. In a way that the teacher (in experimental group 1) and the peer mediators (in experimental group 2) conducts a series of one-on-one DA interactions as the group works toward understanding the meaning and the use of a word.

In experimental group 1, with the teacher as a mediator, the instructor followed 5 stages to help students understand the meaning of each word. The dynamic assessment process includes 5 steps (as cited in Saeidi & Hosseinpour, 2013):

1. Asking the participants in the experimental group to guess the meaning of each highlighted word in the passage.
2. Directing the participants’ attention to prefixes or suffixes in each word (if there will be any).
3. Providing synonyms or antonyms of each word (by the teacher).
4. Using each of the new vocabulary items in different sentences and contexts to help the students get the meaning through lots of examples.

5. Providing the dictionary meaning of the new words if the previous stages had not led students to the correct meaning.

Each step should be followed respectively (from the most implicit to the most explicit prompt) to be in line with the concept of ZPD. Then the students were asked to work individually on the exercises.

In experimental group 2, with peer as a mediator, the students were divided into five groups of four. Each group consisted of one low, two medium, and one high performing students.

Before the treatment sessions, five high performing students were considered as peer mediators and three training sessions were run by the instructor to prepare them to carry out peer-DA in the classroom during which she tried to instruct them on the principles of SCT, DA, and peer-DA and provide them with some sample passages to make sure they followed the 5 stages appropriately; that is, the feedback was graduated, dialogic and contingent.

During each treatment session, all the students were asked to read the passage silently, then team up and work on the passage. The students collaboratively made endeavor to understand the meaning of target words. During their group work, the teacher circulated among the groups and observed their interactions. Each group’s interaction was audio recorded.

After the treatment phase, the post test was administered to both groups to determine their improvement after intervention. The data were analyzed using the Statistical Package for the Social Sciences (SPSS-19). The data to be analyzed consisted of vocabulary scores obtained both from pre-test and post-test and the transcripts divided into LREs (language-related episodes). For the pre-test and post-test, the mean and standard deviation was calculated. The paired t-test was also utilized to determine if there is any statistically significant difference between the proficiency levels of the two groups.
4. Results and Discussion

4.1 The relationship between pre-tests in experimental groups 1 and 2

To check the homogeneity of the students, especially in terms of vocabulary knowledge, a 30-item pre-test was given to both experimental groups 1 and 2 and the independent t-test was calculated. The results of these analyses are presented in Tables 1 and 2.

Table 1: Descriptive Statistics of pre-tests of experimental groups 1 and 2

<table>
<thead>
<tr>
<th>Code</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre1</td>
<td>20</td>
<td>36.6000</td>
<td>1.75919</td>
<td>.39337</td>
</tr>
<tr>
<td>pre2</td>
<td>20</td>
<td>36.7500</td>
<td>1.83174</td>
<td>.40959</td>
</tr>
</tbody>
</table>

As it can be seen in Table 1, there is not a major difference between the mean scores of experimental group 1 (M=36.6) and group 2 (M=36.7).

The result of the independent t-test revealed that there was no difference between the variances and they are equal. The significance value reported for Leven’s test was .625, which was larger than .05 and not significant. (Sig. = .793, p > 0.05)

Table 2: Independent samples t-test for pre-tests of experimental groups 1 and 2

<table>
<thead>
<tr>
<th>pr</th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>.242</td>
<td>.264</td>
</tr>
<tr>
<td>Sig.</td>
<td>.625</td>
<td>-.264</td>
</tr>
<tr>
<td>t</td>
<td>-2.64</td>
<td>38</td>
</tr>
<tr>
<td>df</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.793</td>
<td>.793</td>
</tr>
<tr>
<td>Mean Difference</td>
<td>-.15000</td>
<td>-.15000</td>
</tr>
<tr>
<td>Std. Error Difference</td>
<td>.56789</td>
<td>.56789</td>
</tr>
<tr>
<td>95% Confidence Interval of the Difference</td>
<td>-1.2996 1.2997</td>
<td>-1.2996 1.2997</td>
</tr>
<tr>
<td>Lower</td>
<td>.99970</td>
<td>.99963</td>
</tr>
<tr>
<td>Upper</td>
<td>.99970</td>
<td>.99963</td>
</tr>
</tbody>
</table>
A. The difference between post-tests in experimental groups 1 and 2

After the treatment in both experimental groups 1 and 2, to check which group had improved more, the independent sample t-test was calculated. Based on Table 3 the mean score of experimental group 2 (126.8) was greater than the mean of experimental group 1 (122.5).

Table 3: Descriptive Statistics of post-tests of experimental groups 1 and 2

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Statistic</td>
<td>Statistic</td>
</tr>
<tr>
<td>posttest1</td>
<td>20</td>
<td>122.5500</td>
<td>1.03231</td>
</tr>
<tr>
<td>posttest2</td>
<td>20</td>
<td>126.8000</td>
<td>.78673</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Independent samples t-test for post-tests of experimental groups 1 and 2

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>post test</td>
<td>Equal</td>
<td>1.853</td>
<td>.181</td>
</tr>
<tr>
<td>st variances</td>
<td>assumed</td>
<td>3.27</td>
<td>4</td>
</tr>
<tr>
<td>Equal</td>
<td>35.5</td>
<td>4</td>
<td>04</td>
</tr>
<tr>
<td>variances not</td>
<td>assumed</td>
<td>3.27</td>
<td>4</td>
</tr>
</tbody>
</table>

According to Table 4, the difference between the mean scores of the two groups in the posttests was statistically significant at .002 level of significance (\(P < 0.05\)), and there was a significant difference between the post-tests in experimental groups 1 and 2. (\(Sig. = .002, p < 0.01\))
a. The effect of dynamic assessment through teacher-mediation on reading vocabulary learning
Comparing the means of the pre-test (M=36.6) and post-test (M=122.5) of the experimental group 1 showed that students’ vocabulary knowledge had improved during the study.

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pretest1</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>36.6</td>
<td>20</td>
<td>1.75919</td>
<td></td>
<td>36.7</td>
</tr>
<tr>
<td></td>
<td>posttest1</td>
<td>122.5</td>
<td>20</td>
<td>4.61662</td>
<td></td>
<td>126.8</td>
</tr>
</tbody>
</table>

As presented in table 6, there is a statistically significant difference between pre and post-test in experimental group 1 (Sig. = .000, p < 0.001). The result showed that t19 = -88.682 (p > .00).

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pretest1-posttest1</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>85.95</td>
<td>4.33438</td>
<td>96.920</td>
<td>-87.97855-83.92145</td>
<td></td>
<td>19</td>
<td>.000</td>
</tr>
</tbody>
</table>

B. The effect of dynamic assessment through peer-mediation on reading vocabulary learning
Comparing the means of pre-test (M=36.7) and post-test (M=126.8) showed that the students of experimental group 2 also improved their vocabulary knowledge throughout the study.

<table>
<thead>
<tr>
<th>Pair</th>
<th>Pretest2</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>36.7</td>
<td>20</td>
<td>1.83174</td>
<td></td>
<td>36.7</td>
</tr>
<tr>
<td></td>
<td>posttest2</td>
<td>126.8</td>
<td>20</td>
<td>3.51837</td>
<td></td>
<td>126.8</td>
</tr>
</tbody>
</table>

Based on table 8, the results showed a significant difference between pre-test and post-tests in experimental group 2 (Sig. = .000, p < 0.001).
The difference between the obtained means for the two pre- and post-tests of vocabulary in the experimental group 1 (-85.95) is smaller than the difference between those for pre- and post-tests of vocabulary in the experimental group 2 (-90.05).

Based on the results of this study, students in peer-mediated group (experimental group 2) performed better on their post reading vocabulary test.

The results of both paired t-tests revealed that there was a statistically significant difference between pre and post vocabulary tests in both experimental group 1 (Sig. = .000, p < 0.001) and experimental group 2 (Sig. = .000, p < 0.001). So it can be concluded that using DA can improve students’ vocabulary knowledge. The present study revealed that feedback provided by the peer or teacher seemed helpful enough to remove their problems to a great extent. However, an independent t-test on students’ posttest vocabulary scores showed a significant difference between the performances of the two groups ($t = -3.27, df = 38, p = .002$). If we can attribute this gain to the mediating behaviors, then students in the peer-mediated class benefited more than the students in the teacher-mediated class in improving their reading vocabulary knowledge.

To indicate how students could assist each other to internalize the word meanings in experimental group 2, all interactions occurred among the students were recorded and a number of them were transcribed carefully. That is; it was investigated to show how the offered mediations by the students assisted their peers to discern the aspects of the embedded vocabulary most specially meaning. To this end, a microgenetic analysis approach was used. Microgenesis, according to Ellis and Barkhuizen
(2005), as a data analysis approach, is utilized to show how developments occur over the course of a specific interaction in a particular setting.

**Episode 1**
1. Sara (peer mediator): “Bahar, do you know the meaning of ‘thrilling’?”
2. Bahar: “Does it mean ‘scary’?”
3. Sara: “read the sentence again.”
4. Zahra: “No, it can’t be. It said It wasn’t frightening, it was thrilling.”
5. Sara: “good. And the previous sentence said ‘The ocean got my attention’.”
6. Bahar: “aha, that means interesting”.

As can be seen, Sara gave her an indirect feedback and gradually made her guidance more explicit to promote collaboratively her knowledge of the key word.

**5. Conclusion**

This study concluded that both peer and teacher mediation can improve students’ vocabulary learning during the course of instruction. However peer mediation proved to be more effective on the learners’ reading vocabulary learning.

The findings of the study were in line with Shamir and Steven (2005) who found that mediators and learners received significantly higher scores on autonomy behavior criteria which displayed the significant role of peer mediation. The findings were compatible with the results found by Erfanil & Nikbin (2015) who compared the effect of peer-assisted mediation vs. tutor-intervention within dynamic assessment framework on writing development. By comparing the post-tests they indicated that the peer-assisted mediation group outperformed tutor-intervention group.

The findings of this study were supported by the idea that dynamic assessment can unify instruction with assessment to provide learners
with mediation in order to promote their reserved learning potential during the assessment. EFL teachers may promote techniques of dynamic assessment through peer mediation, making the peers as mediators via teaching them how to provide feedback to remove the errors. This may also establish a friendly and challenging atmosphere which facilitates learning process and in turn enhances cooperation and collaboration learning. The peer-assisted mediation can adjust the teachers’ responsibility in some cases, so that they will be able to manage the class more efficiently. Peer mediation leads to a decrease in complications at educational settings, enhancement of learners’ self-esteem, improvement of their attendance, and encouragement of the learners in problem-solving situations to find more novel solutions. Similarly the teachers make available the ongoing feedback on vocabulary learning process to support the learners at each stage.

There exist some limitations with the study that should be noted. The sampling procedure was non-random and the participants were all female because of the logistical problems male gender was not included.

References


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