



## **Teacher-vs. Peer-mediated Learning of Grammar through Dynamic Assessment: A Sociocultural Perspective**

**Farid Khanahmadi**

PhD candidate, University of Urmia, Iran, [khanahmadi.farid@gmail.com](mailto:khanahmadi.farid@gmail.com)

**Mehdi Sarkhosh**

Asst. Prof., University of Urmia, Iran, [mdsarkhosh@gmail.com](mailto:mdsarkhosh@gmail.com)

Mediation in general, and teacher and peer mediation in particular, whose genesis are Vygotsky's sociocultural and Feuerstein's mediated learning experience theories, is a novel approach aimed at teaching low level learners by an experienced instructor or peer. The main objectives of the present study, however, were to investigate the effects of teacher and peer mediation on EFL learners' grammar learning (active vs. passive voice) at pre-intermediate level. In addition, the focus was on the effectiveness of two strategies of mediation on the grammar learning and retention of target forms. To this end, a sample of 45 EFL learners at the age range of 14 to 19 was selected from among 68 low-intermediate learners of a private language institute in Khoy, Iran. A homogeneity test, pretest, immediate and delayed posttests were used as data collection tools. The results revealed that teacher mediation was more effective than the peer mediation and traditional group in improving the learning of active vs. passive voice in both the short-run and the long-run.

Keywords: peer mediation, teacher mediation, grammar learning, active voice, passive voice

### **INTRODUCTION**

Teaching and classrooms are usually connected with concepts such as theory and practice as, Williams and Burden (1997) feel that not only should teachers be aware of the degree of match and mismatch between their "espoused" theories and their "theories-in action", they also need to know the many different ways through which they can influence the learning process in their classrooms through their "words" and "actions". Some of these ways, according to Williams and Burden, would be "teaching learners how to learn, boosting their confidence, motivating, displaying a personal interest, enhancing self-esteem, and organizing an appropriate learning environment" (p. 65).

It seems that each of these ways belongs to different schools of thought in psychology, behaviourism, cognitive approaches and humanistic approaches among them. Cognitive

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approaches to psychology lay weight on learners' cognitive involvement in learning and humanistic approaches lay stress on whole-person involvement in learning. Therefore, it seems that none of the mentioned approaches taps on the social facets of learning whilst as Halliday (1973) argues, language is fundamentally a social phenomenon; likewise, it needs to be learned in an appropriate social context through interaction. Consequently, we need a different approach that not only encompasses the insights of the previous psychological approaches, but also pays a close attention to social interactions, i.e., *social interactionism*. Unfortunately, so far, this important aspect of learning has appropriately not received the level of attention it deserves in EFL contexts in general, and in the Iranian EFL settings in particular. It should be noted that the most important concept to both Vygotskian and Feuersteinian psychology and social interactionists is *mediation*, which refers to the role that others play in children's lives. To be more exact, other people who are more knowledgeable and experienced than the children, can act as mediators and help them move slightly beyond their current level of knowledge. Mediation to Vygotsky and his followers, a concept that has had crucial part in all social interactionist theories, refers to the application and use of 'tools', which in this regard, refer to anything that can be used to solve problems or achieve a goal. The most important of these tools according to Kozulin (1990) is symbolic language (cited in Williams & Burden, 1997).

Vygotsky proposed the concept as *zone of proximal development* (ZPD), which refers to the level of knowledge and skill beyond that of the current level of a child when mediated by another person. It is in fact the distance between child's actual level of development and his/her potential level of development when mediated appropriately. For these psychologists, what is of particular significance is the use of mediational language that helps learners move into and through their ZPD. Peer mediation and teacher mediation as two types of mediation were the focus of the present study. It is axiomatic that teacher mediation came to the scene with the emergence of scaffolding and mediation, but the concept of peer mediation as a newly developed concept (Shamir, 2005) was introduced following the studies about the role of mother-child mediation and the studies on the nature of children's cognitive modifiability (Tzuriel, 1999).

As stated above, scaffolding in general, and teacher and peer mediation in particular have been studied from the heydays of sociocultural theory (SCT) up to the present time by different scholars. Nevertheless, there are still some aspects of mediation, especially peer mediation which have been neglected to a large extent. Thus, owing to the already mentioned gaps and a dearth of adequate empirical studies into the role that mediation/mediated learning experience can play in language learning, especially when it comes to grammar, this study intended to apply a dynamic assessment intervention. That is to say, a dialogic mediation between the examiner and the examinee (mediator-learner interaction), which includes *hints*, *explanations*, *suggestions*, *prompts*, and more importantly *leading questions*, *examples*, and *demonstrations* offered by the tester to help students develop their English language abilities and become effective and independent learners. Then, based on the aims of the present study, the following research questions were formulated:

RQ1: Is there any significant difference in the relative effects of teacher-mediation and peer-mediation on pre-intermediate English learners' use of target forms (active vs. passive voices) in the short-run?

RQ2: Is there any significant difference in the relative effects of teacher-mediation and peer-mediation on pre-intermediate English learners' use of target forms (active vs. passive voices) in the long-run?

### Literature review

To begin with, it should be noted that despite the fact that the genesis of dynamic assessment was Vygotsky's SCT of mind and his notion of ZPD, the word dynamic assessment was not used directly by Vygotsky himself; rather it was his colleague Luria, who first coined the term *dynamic assessment* (DA), a concept that was popularized by special educator Reuven Feuerstein (Poehner, 2007). DA cavaliers are mainly Binet, Vygotsky, and Feuerstein, respectively, whose work led assessment to a rapidly growing testing renaissance. However, Poehner (2008) observes that a historical precedent to DA can be found in the Socratic dialogues described by Plato. Through Socratic method, that is, clever questioning and quick insightful responses, Socrates succeeds time and helps his interlocutors to notice the flaws in certain ideas whilst simultaneously in a collaborative fashion, constructs a new perspective. As a prime example of such a dialogue, Poehner refers to *Phaedrus*, where Socrates draws on a series of leading questions and suggestions to aid the title character identify certain logical problems in a speech he had been admiring, and whereby sets the scene to launch off in new directions of thinking on the topic. In this process, as argues Poehner, the Socratic dialogue involves, to some extent, simultaneous assessment and instruction.

DA as an interactive test-intervene-retest procedure is a model of psychological and psycho-educational assessment, which is highly appealing to practicing psychologists (Haywood & Lidz, 2007). It has somehow found its way to psychological, neurological, speech/language, and educational settings; in other words, it has already been applied in the aforementioned contexts. Poehner (2008) also observes that DA arises from an ontological perspective on human abilities, which Russian psychologist Vygotsky developed more than 80 years ago. Thus, as Poehner claimed, social milieu is the main element in cognitive development in which individual's cooperation and involvement in different activities is mediated by another person (mediator) or even by other means. In other words, in Vygotskian SCT, man's cognition is studied within its social context (Azabdaftari, 2015). Very simply, cognitive and educational development are both directed and affected by social environment. For Karpove (2008), DA makes it possible to evaluate learners' learning potential; however, he is also of the opinion that some of the DA techniques do not evaluate kinds of learning potential, and his rationale behind his assertion is Haywood and Lidz's (2007) sound proclamation to the effect that the concept of learning potential is not well defined so that different DA techniques evaluate different potentials. Poehner (2008) asserts that the ZPD is Vygotsky's solution to overcome the instruction-assessment dualism. According to Lantolf and Thorne (2006), ZPD has attracted educators and psychologists for a variety of reasons including notion of assisted performance, which has been the incentive behind much of the interest in

Vygotsky's research and ZPD in contrast to traditional tests and measures and claims what one can do today with help is indicative of what one will be ready to do independently without any assistance in the future.

For Poehner and Lantolf (2003), central to ZPD, and the core concept of Vygotsky's theory of mind, is *mediation*. They assert that socially and culturally derived forms of thinking are of higher forms which emerge as a consequence of our interaction with other individuals and with physical and symbolic artifacts (e.g., books, paper and pencil, Computers, diagrams, numbers and language, etc.). They believe that these higher forms are constructed by others in different places and at different times. Thus, in this way, according to Poehner and Lantolf (2003), our relationship to the world is not direct; rather it is mediated. Depending on the level of support received by a child on a task, varying outcomes can be expected (Murphy, 2008). "Performance at the functional level is expected with minimal or no support as opposed to optimal performance when supported in a task" (Suizzo, 2000, cited in Murphy, 2008, p. 194). Vygotsky's formulation of ZPD was based on his observation that schooling frequently enhanced the IQ score of some but not all children (Van der Veer & Valsiner, 1991, cited in Poehner & Lantolf, 2003). Importantly, it was the children who entered school with low scores who most often improved over time, while those with already high scores generally did not show much improvement. Vygotsky, according to Poehner and Lantolf (2003), reasoned that this differential effect of schooling was a consequence of the fact that children with high IQs had already traversed the distance between their *actual* and *potential* development (relative to what the school curriculum concretely offered) prior to entering school, but that their low IQ classmates still had room for development to occur.

In his work on the problem of age in development, Vygotsky argues against the general view that independent problem solving is the only valid indication of mental functioning, suggesting that this reveals only part of a person's mental abilities - his or her actual development level (Lantolf & Poehner, 2003; Lantolf & Thorn, 2006). To Vygotsky, responsiveness to assistance is an indispensable feature for understanding cognitive ability because it provides an insight into the person's *future* development. That is, what the individual is able to do today with assistance, she/he is able to do tomorrow by himself. Potential development varies independently of actual development, meaning that the latter, in and of itself, cannot be used to predict the former. Moreover, the former is not a prior prediction but is derived from concrete activity mediated by others or by cultural artifacts" (Poehner & Lantolf, 2003).

As mentioned before, this study focused on two types of mediation (teacher vs. peer mediation); these mediation strategies have been studied from different angles. For instance, Ableeva (2008) conducted a test –teacher intervention-retest model of study focusing primarily on the effects of DA on developing L2 French students' listening comprehension at university-level in which participants achieved a better comprehension with mediator guidance. Through mediation, Ableeva was able to uncover the source of comprehension problems that in one case hinged on a single lexical item and in another on cultural knowledge, which revealed that learners' abilities

were more developed than one would have surmised from unmediated performance. Hidri (2014), in a study, tried to address the need to investigate and improve current assessments of listening comprehension of university EFL learners; those that adopt a traditional approach where learners listen as usual to an audio recording of a spoken interaction and then are required to answer some written questions independently. He proposed and explored a DA of a listening test, which involved mediation and meaning negotiation as the learners tried to respond to the listening comprehension tasks. Based on qualitative data analysis, it was revealed that DA based assessment outperformed the static one in providing better insights into learners' cognitive and meta-cognitive processes; however, as claims Hidri, raters were doubtful about the value of and processes involved in DA arguing that they were not familiar with it.

The realization of children's learning potential, according to the theories of Vygotsky and Feuerstein, is conditioned by exposure to experiences in social interaction with persons, either adults or peers, who are more competent than learners (Tzuriel & Shamir, 2007). There have been some studies in the area of mediation in general and peer mediation in particular from previous decades. For instance, Tzuriel and Shamir (2007) tried to explore the effects of Peer Mediation with Young Children (PMYC) program on children's cognitive modifiability of mediators and learners along with studying the effects of cognitive level of the learner and mediator on their cognitive modifiability following the program. They randomly assigned a sample of 178 pupils to experimental and control groups. The mediators in the experimental group participated in the PMYC program, whereas the mediators in the control group received a substitute intervention aimed at emphasizing general conditions of peer interaction. The findings revealed that following the intervention, it is the mediators in the experimental group that showed higher level of analogy scores, as well as higher improvement on the dynamic analogy measure as compared with control mediators. The experimental learners also showed higher pre-to post-intervention achievements on the seriation problems as compared with control learners. They believed that "mediators in the experimental group had to cope with the incongruent cognitive level by facilitating their mediational approach and consequently enhancing the learner's performance" (p. 1).

Considering the literature on the mediated learning, the researchers came to the conclusion that no study had investigated the role of mediated learning on the learning of active and passive voice in English. What adds novelty to the present study is the fact that the study of the effect of two types of mediated learning, that is, teacher vs. peer mediation on the learning of active and passive voice is unprecedented in English learning and teaching contexts. Therefore, this study is an attempt to fill in this gap and contribute to the existing literature on the role of mediation in learning in English as a foreign language (EFL) contexts.

## **METHOD**

### **Research design**

To investigate the research questions, a quasi-experimental pretest, posttest research design was employed. "A typical experimental study usually uses comparisons or

control groups to investigate research questions" (Mackey & Gass, 2005, p. 146). Since this study was an exploration of the effect of a treatment between two groups i.e. the experimental and control groups, Mackey and Gass (2005) categorized these kinds of studies as "between-groups design" in which one of the groups, i.e. the control group, receives non-treatment. In addition, since the researcher selected the participants based on the non-probability sampling and convenience sampling, this research is to be considered a quasi-experimental one. Mediation is the independent variable that took place at two levels of teacher-mediation and peer-mediation and the dependent variable is the learning of passive/active voice.

### **Sampling and participants**

In order to explore the potential effect(s) of teacher and peer mediation on English grammar learning, a DA intervention approach was utilized. Even though, based on the standards and placement test of the institute under study, the learners were considered as homogeneous and had the same English language proficiency; actually, the researcher administered Oxford Proficiency Test (OPT) to ensure the homogeneity. After the results of OPT, 45 male low-intermediate students of English with the age range of 14-19, who were learning English at one of the private language institutes in Khoy, Iran, were selected from among 68 EFL learners based on 1SD above and below the mean on OPT homogeneity test. After this phase, the learners were assigned to three groups i.e., experimental group (A), experimental group (B), and control group. They were all natives of Khoy, a city located in west Azerbaijan in Iran, and their mother tongue was Turkish.

### **Instruments**

The instruments included: 1) OPT homogeneity test, 2) pre-test, 3) immediate and delayed post-tests.

#### *1) OPT*

At the onset of the study, OPT was used in order to homogenize the participants' level of language proficiency. The questions of the mentioned test were taken from 'Oxford University Press and The University of Cambridge Local Examinations Syndicate' by Fischer (2001). The test has 50 items in the form of multiple-choice questions. The items are related to grammar, vocabulary and pronunciation mostly and students' general English ability is estimated through these sub-skills. The criterion for learners' homogeneity was their scores based on one standard deviation above and below the mean. Allotted time to answer the questions was 60 minutes.

#### *2. Pretest & Posttests*

The second instrument, in the current study, was a pretest to check the EFL learners' knowledge of active/passive voice. The same test, which was used for pretest, was also utilized for Immediate and delayed posttests in order to ensure comparability. In this study, the focus was on the grammar learning and the textbook at the institute under study contains different grammatical points such as present perfect and simple present tenses as well as active/passive voice. Based on the experience of the researcher as a

teacher and based on the content of the textbook, the tests were designed from among the standard tests of the institute. The total number of items in the test was 40 and the allotted time for test was 45 minutes. Considering the important role of validity, the test had been expert-judged by three experts in the assessment board of the institute. The panel of experts reported acceptable validity. The total score was considered 20 and the reliability of the scale was calculated through Cronbach's  $\alpha$  to be 0.84.

### Procedure

Two weeks before the beginning of the study, students were homogenized based on the scores of OPT, which is designed to test the lower-intermediate to intermediate learners' general language proficiency. The criterion for homogeneity of the learners was their scores based on one standard deviation above and below the mean. After this phase, in order to investigate any possible impact of the two mediation options, the 45 homogenized learners, from among the total of 68 EFL learners, were divided into three groups. The first group constituted the control group of the study and the two others made the experimental group (A) and experimental group (B). For the first experimental group, the teacher mediated the learners and, in the next experimental group, it was the learners themselves who mediated and interacted with each other, of course, after being well informed about the nature of mediation by the researcher.

After homogenizing the learners, they were pretested by a grammar pretest as explained above in a different session before the treatment. The time limit for the pretest was 45 minutes. One session after the pre-test, the instructor in the control group taught active/passive voice in the form of explicit grammar teaching. The learners were asked to use statements containing verbs and adjectives followed by active and passive voice according to the instructions given to them. The procedure for the control group included explanations regarding grammar in the target form under study in the beginning of the class. Also, different tasks like reading comprehension texts, role play, fill in the blanks and free composition were presented to the learners in order to elicit their knowledge in using active/passive voice. After two sessions of instruction and practice, at the third session, the students were given the immediate posttest, but without any mediation or any other form of assistance; in other words, the test was administered through *non-dynamic* procedure, which is also known as *traditional* or *static* approach. Four weeks after the immediate post-test, students in the control group took the delayed post-test with no mediation or scaffolding from the researcher.

The same process was carried out in teacher-mediation group as experimental group (A) with some differences. Very similar to the control group, the learners in teacher-mediation group took the pretest and were taught active/passive voice during two sessions and after that at the third session, immediate posttest was given to this group, but this time the researcher mediated the learners during the test. Indeed, the treatment was actually teacher's active engagement with the students during the test in that the researcher provided the learners with necessary *explanations, suggestions, hints, leading questions, examples* in a flexible and dialogic interaction. When necessary, learners along with the researcher resorted to their L1 during the mediation stage i.e., DA intervention or what Kozulin and Grab (2001) refer to as the *teach* stage. Four weeks

after the immediate posttest, the learners in teacher-mediation group took the delayed posttest with the assistance of their own researcher.

The third group that was peer-mediation group as experimental group (B) received the same process as with the experimental group (A) and control group with a slight difference. In this group, it was not the researcher who mediated the learners during the immediate and delayed posttests, rather it was the students themselves who mediated each other using necessary *explanations, suggestions, hints, leading questions, examples* in English or in their L1 when necessary. In short, all the processes that happened on three separate sessions in the experimental group (A) happened in the experimental group (B) as well.

### Data analysis

To find answers to the research questions that investigated the existence of any significant difference in the relative effects of teacher-mediation versus peer-mediation on the performance of pre-intermediate English learners in the use of target forms (active vs. passive voice) in the short and long run, One-Way ANOVA test was run. Descriptive statistics and the relevant tables and figure are also presented.

### FINDINGS

The first null hypothesis claimed that “*there is no significant difference in the relative effects of teacher-mediation and peer-mediation on pre-intermediate English learners’ use of target forms (active vs. passive voices) in the short-run*”. In order to test the hypothesis, One-way ANOVA was run. The number of the participants (N), means (M) and standard deviations (SD) of scores in the use of target forms under study for each group is displayed in Table 1.

Table 1  
Descriptive Statistics of Groups in the Short-run

		N	Min	Max	Mean	Std. Deviation	Variance
		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
Pretest	Control	15	2.00	9.00	5.9000	.48068	2.14966
	Teacher Mediation	15	2.00	9.00	6.0500	.47281	2.11449
	Peer Mediation	15	2.00	9.00	5.9000	.46960	2.10013
Immediate Posttest							
	Control	15	5.00	11.00	7.7000	.44780	2.00263
	Teacher Mediation	15	14.00	19.00	16.4000	.33561	1.50088
	Peer Mediation	15	7.00	12.00	9.2000	.33717	1.50787
Delayed-Pretest							
	Control	15	4.00	10.00	7.0000	.41675	1.86378
	Teacher Mediation	15	12.00	17.00	14.0000	.35541	1.58944
	Peer Mediation	15	5.00	11.00	7.9000	.39670	1.77408

As is clear from Table 1, the means of groups are pretty the same at pretest, but they are different in the immediate and delayed posttests. Then, it can be concluded that the learners were the same before the treatment but they were different after the treatment.

Table 2  
Tests of Normality for the Pretest, Immediate and Delayed Posttests

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Pretest Control	.146	15	.200*	.947	20	.319
Teacher Mediation	.140	15	.200*	.940	20	.239
Peer Mediation	.116	15	.200*	.954	20	.430
Immediate Posttest Control	.152	15	.200*	.924	20	.117
Teacher Mediation	.155	15	.200*	.944	20	.282
Peer Mediation	.153	15	.200*	.933	20	.176
Delayed-Pretest Control	.108	15	.200*	.949	20	.351
Teacher Mediation	.185	15	.070	.912	20	.069
Peer Mediation	.182	15	.080	.943	20	.269

As all the significance levels are higher than 0.05, it can be concluded that the scores are normally distributed. Therefore, parametric statistics can be utilized. There is a need for running One-way ANOVA to investigate the significance of the difference among the three groups. However, before running One-Way ANOVA, a test of homogeneity of variances, as an assumption to be met, needed to be ensured. The result is illustrated in Table 3.

Table 3  
Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
2.003	2	57	.144

As Table three shows, since the p-value (.144) is higher than the significance level (.05), the assumption of the homogeneity of variances is also met. Thus, ANOVA can be conducted on pretest and immediate posttest scores. Table four shows the results of ANOVA in the short-run.

Table 4  
Results of ANOVA from pretest to immediate posttest

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	833.700	2	416.850	915.624	.000
Within Groups	25.950	57	.455		
Total	859.650	59			

Since the p value is  $.000 \leq 0.05$ , it can be said that the groups are heterogeneous,  $F(2, 57) = 915.6$ ,  $p = .000$ . As stated, a statistically significant deference was found between the groups; therefore, in the short-term, the researcher, in order to find out where this difference lied, needed to run a post-hoc test. Table five shows the results of the post hoc test.

Table 5  
Results of the Post Hoc Test in the short-run

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Control group	Teacher Mediation group	-8.55000*	.213	.000	-9.0635	-8.0365
	Peer Mediation group	-1.50000*	.213	.000	-2.0135	-.9865
Teacher Mediation group	Control group	8.55000*	.213	.000	8.0365	9.0635
	Peer Mediation group	7.05000*	.213	.000	6.5365	7.5635
Peer Mediation group	Control group	1.50000*	.213	.000	.9865	2.0135
	Teacher Mediation group	-7.05000*	.213	.000	-7.5635	-6.5365

\*. The mean difference is significant at the 0.05 level.

Based on Table five, there was a significant difference between teacher mediation and peer mediation and peer mediation and control group, then, based on the columns, it can be concluded that the teacher mediation was better than peer mediation group and control group in grammar learning from pretest to immediate posttest in the short-run. Therefore, the first hypothesis of the study “*there is no significant difference in the relative effects of teacher-mediation and peer-mediation on pre-intermediate English learners’ use of target forms (active vs. passive voices) in the short-run*”, is rejected, figure one clarifies the results of treatment in the short-run.

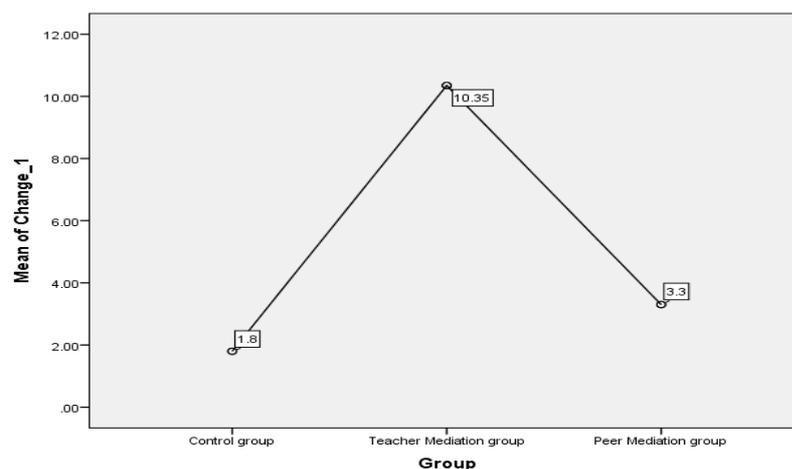


Figure 1  
The results of group's performance in the short-run

### Hypothesis Two

The present study also aimed at discovering the role of mediation on grammar retention in the long-run. The related analyses are carried out to investigate the second hypothesis of the current study, “*There is not any significant difference in the relative effects of teacher-mediation and peer-mediation on pre-intermediate English learners’ use of target forms (active vs. passive voices) in the long-run?*”.

Table 6 shows the results of ANOVA from pretest to delayed posttest.

Table 6

Results of ANOVA from pretest to delayed posttest

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	554.233	2	277.117	638.208	.000
Within Groups	24.750	57	.434		
Total	578.983	59			

Since the p-value is  $.000 \leq 0.05$ , it can be said that the groups are heterogeneous,  $F(2, 57) = 638.2$ ,  $p = .000$ . As stated, a statistically significant difference was found between the groups in the long-run, the researcher needed to compute a post hoc test (Tukey or Scheffe post hoc tests). Table seven shows the results of post hoc test in the long-run.

Table 7

Results of Post Hoc Test in the long-run

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	Lower Bound	Upper Bound
Control group	Teacher Mediation group	-6.85000*	.20838	.000	-7.3514	-6.3486	
	Peer Mediation group	-.90000*	.20838	.000	-1.4014	-.3986	
Teacher Mediation group	Control group	6.85000*	.20838	.000	6.3486	7.3514	
	Peer Mediation group	5.95000*	.20838	.000	5.4486	6.4514	
Peer Mediation group	Control group	.90000*	.20838	.000	.3986	1.4014	
	Teacher Mediation group	-5.95000*	.20838	.000	-6.4514	-5.4486	

\*. The mean difference is significant at the 0.05 level.

Based on Table seven, there was a significant difference between teacher mediation and peer mediation and peer mediation and control group in the long-run, then, based on the columns, it can be concluded that the teacher mediation was better than peer mediation group and control group in grammar learning from pretest to delayed posttest in the long-run. It means, grammar retention was high in teacher mediation group in comparison with peer mediation. Therefore, the second hypothesis, “*There is not any significant difference in the relative effects of teacher-mediation and peer-mediation on*

*pre-intermediate English learners' use of target forms (active vs. passive voices) in the long-run?" is rejected. Figure two clarifies the results of grammar retention of mediation strategies in the long-run.*

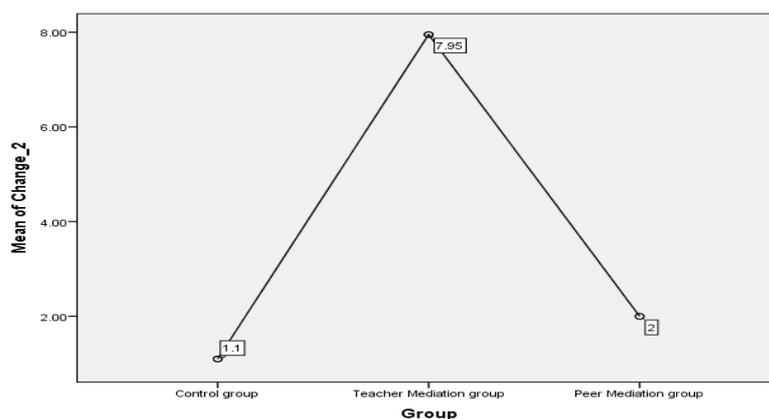


Figure 2  
The results of group's performance in long-term

## DISCUSSION

The purpose of the current study was to investigate the effectiveness of mediation techniques (teacher mediation & peer mediation) on grammar (active vs. passive voice) learning of EFL learners at pre-intermediate level. The first research question attempted to explore the effect of teacher mediation and peer mediation, as sociocultural theory strategies, and explicit/traditional grammar instruction on the Iranian pre-intermediate EFL learners' grammar learning. The results revealed that teacher mediation improved adult EFL learners' grammar learning in the short-run. In other words, the results are in favor of using teacher mediation strategy in teaching target forms. The reason for the effectiveness of teacher mediation in adult learners' classrooms may be because of the fact that teacher mediation, as a scaffolding tool, removes anxiety of the students and, consequently, increases their performance in learning a sub-skill like grammar. Furthermore, the results of the post hoc analysis indicated that the effects of peer mediation and conventional grammar instruction were not statistically significant in grammar learning of adult EFL learners. Therefore, the first null hypothesis, which claimed "*There is no significant difference in the relative effects of teacher-mediation and peer-mediation on pre-intermediate English learners' use of target forms (active vs. passive voices) in the short-run*" was rejected.

The results divulged that peer mediation was not effective. The reason for the ineffectiveness of peer mediation strategy can be the difficulty in performing this technique for low-level learners of this study in a context like Iran. Since it is a strategy that some learners are not familiar with; as we saw in Hidri's case mentioned earlier, and, in fact, they are reluctant to use it, perhaps due to the personality factors such as pride and arrogance or mainly shyness. That said, it is argued that peer assessment can

be controversial in that it can yield unreliable results caused by student assessors' lack of experience, and often produces undifferentiated marks (Kennedy, 2005). Also as Clark, Davies and Skeers (2005) mention, the labor-intensive processes that the subject coordinators have to administer are problematic. One more good explanation for the ineffectiveness of peer mediation was the uncomfortable nature of the peer-mediation while conducting assessment in testing, perhaps due to individual differences. This justification has been approved by different studies such as Freeman and McKenzie (2002), who claimed traditional peer mediation creates an uncomfortable context and some students seem to be dishonest and unfair during traditional peer mediation when compared with online peer-mediation. Despite its mentioned shortcomings, not only do students who are involved in the process benefit from it, but also it has considerable outcomes for peer mediators themselves and as (Lane & McWhirter, 1992; Roush & Hall, 1993; Stomfay-Stitz, 1994, cited in Humphries, 1999) point out, student mediators generally are capable of expressing problems, developing skills required to solve those problems, developing better communication skills, and also having a more positive view of themselves.

The second research question addressed the effectiveness of teacher mediation, peer mediation, and traditional instruction in grammar learning and retention of pre-intermediate EFL learners in the long-run through a delayed posttest. The results indicated that low-level learners in the long-run did not forget the target forms taught to them via teacher mediation. The reason for the effectiveness of teacher mediation on grammar retention of EFL learners can be that teacher mediation during testing can relieve the tension of the testing and pressure of instruction and can create positive, effective and memorable memories and the memories, consequently, can strengthen the grammar retention, which can be further examined via interviews or think-aloud protocols. The other justification for the long-term effectiveness of teacher-mediation can be the effect that teacher-mediation had on Social/emotional learning (SEL) of the learners. SEL as a cognitive-affective concept focuses on assisting the individuals, especially lower-level learners to gain knowledge about feelings and getting along with others (Marion, 2011). There is a necessity of education to broaden teachers and students' understanding of one another in order to model practices that teach social, communication, and problem-solving skills. Finally, it is assumed that teacher-mediation offers a positive way to break the demotivating cycle of education in schools and language institutes. Demotivating cycle of education is when a pupil enters an educational setting like a class and may exhibit frustration, withdrawal, or more disruptive behavior, which in turn may result in more isolation.

Then, the second null hypothesis that claimed "There is no significant difference in the relative effects of teacher-mediation and peer-mediation on pre-intermediate English learners' use of target forms (active vs. passive voices) in the long-run" was rejected. Regarding the ineffectiveness of peer mediation, the findings of this study can be in harmony with Piaget (1970) and Dewey's (1902) constructivist approaches. According to the constructivist notions of Piaget and Dewey, children learn spontaneously when given opportunities to discover laws, concepts and operations by themselves. By contrast, regarding the effectiveness of teacher mediation, both Vygotsky and Feuerstein

hold that scientific concepts or any higher-order cognitive processes are better acquired by active intentional efforts from an experienced mediator.

The present research can also offer implications for EFL students in that, instead of the traditional methods of testing and instruction, they can try a mixture of different strategies like teacher or peer mediation in their own learning experiences. Because there is no “one-size-fits-all” method of instruction, then, teacher-student mediation may allow the teachers and learners to provide a safe way to identify the root causes of problematic issues like grammar or syntax. More specifically, the findings of this study can arouse both teachers and learners' interest in a dynamic approach, since there is a kind of interaction and cooperation between teachers and learners, which results in a class atmosphere in which learners may feel more secure and relaxed. Indeed, in a dynamic approach, we amalgamate assessment and instruction, the result of which will promote teaching and learning to a certain degree and testing or assessment will lose its daunting and threatening face.

### **CONCLUSION**

As stated, the current study aimed at exploring the effect of two mediation techniques that were teacher mediation and peer mediation on grammar learning and retention of EFL learners at pre-intermediate level. The findings indicated that at both the short and long run, teacher mediation was more effective than peer mediation and traditional method. The findings convey the idea that not all types of DA can be equally effective as was observed in the present study that teacher mediation proved to improve the learning of passive/active voice in both the short and long run. However, peer mediation did not promote the performance of the participants at either the immediate or delayed posttests.

Although the present study was subject to some limitations such as course length and the level of participants, actually, for future body of research, it is recommended that this study be replicated with a larger number of participants at different language proficiency levels to compare the results across these levels. The length of the course may be critical in gaining results; thus, a similar research can be conducted through a longer course of instruction to compare the results of the investigations. Investigation of other types of mediation can also be a rich area for future researchers in the EFL contexts.

The implications of this study can be helpful for the use of language teachers who can apply mediation in their classes for improving grammatical accuracy of the learners. They also can give special attention to the role of peer mediation based on the level of the learners. Teacher trainers can also instruct the teachers how to use scaffolding and mediation in teaching process, of course after priming them for the value and effectiveness of such methodology. Material designers can prepare materials that encourage teachers and learners to use mediation in the classroom based on students' level of knowledge and their individual differences. Also, as a comprehensive and comparative study, the research can help EFL teachers to be aware of the nature of scaffolding and usefulness of teacher mediation as a useful device to lead their students to enhance their linguistic competence.

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