

## Upper-intermediate and Advanced EFL Learners' Reciprocity to Mediation: A Dynamic Listening Assessment

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**Abstract:** The present study aimed to capture and represent the mediator-learner's interaction in the development of listening proficiency and statistically compare this interaction between high and low proficient English as a foreign language (EFL) learners. Thirty EFL learners participated in Oxford Quick Placemat Test (OQPT) and the Interactions/Mosaic Listening Placement (IMLP) Test to select those whose proficiency levels and listening skills were based on the placement guide of the tests, at upper-intermediate and advanced levels. Out of 30 learners, 12 learners (upper-intermediate level=6, advanced level=6) volunteered to participate in individualized tutoring sessions. The study adopted an interactionist Dynamic Assessment (DA) approach and implemented a qualitative research methodology to reveal the frequency and quality, the two criteria to interpret the learners' developments and Zone of Actual/Potential Development (ZAD/ZPD) functioning, of mediator-learner's interaction. The amount and quality of moves made by learners to complete the task were reported in quantitative data. Statistical analyses were run to examine whether the ability level may affect the responsiveness of learners to mediation. Findings of the study revealed that 17 reciprocity moves were identified that promoted the development of listening abilities of upper-intermediate and advanced level learners. It is also revealed that the upper-intermediate learners showed more responses as compared to the advanced learners.

**Keywords:** Dynamic Assessment, Listening, Mediation, Proficiency Level, Reciprocity, ZPD.

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## Introduction

Sociocultural Theory (SCT) was expanded by the soviet psychologist, Lev S. Vygotsky in 1920s and 1930s. Vygotsky's work on the sociocultural theory of mind was in part inspired by Marxist philosophy that proposed human beings affect and are affected by their environment when they are engaged in "concrete activity mediated by physical tools" (Poehner, 2008, p. 25). Vygotsky applied this concept to psychology by proposing that cognitive functions are also developed through mediation. They developed the assumption that meaning is created either through interacting with others, i.e., socially, or through using cultural objects, i.e., culturally (Poehner, 2008).

Vygotsky's sociocultural theory of human learning and development describes learning as a social process, and that human intelligence originates in society or culture. He claimed that in the early stages of cognitive development, the child is totally dependent on his/her parents who are representative of the culture and, primarily through the use of language as a tool, instruct him/her in how to behave and familiarize him/her with the culture. According to Vygotsky (1978), everything is learned on two levels: initially, through having interaction with others, i.e., intermental, and then it is integrated into individual's mental structure, i.e., intramental. Such social-then-psychological learning is based on the premise of mediation. In other words, it is exclusively through mediation provided in social interactions that one may reach self-regulation. Relevant to the purpose of the present study, first the Zone of Proximal Development (ZPD) and Dynamic Assessment (DA) principles and then the concept of mediation and reciprocity will be discussed.

At the heart of ZPD concept is the fine-tuned assistance which helps the individual move from other-regulation to self-regulation (Aljaafreh & Lantolf, 1994). ZPD is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable others" (Vygotsky, 1978, p. 86). In other words, ZPD is what Vygotsky proposed for measuring the distance between what a person is able to do at the moment, i.e. Zone of Actual Development (ZAD), and what s/he will be able to do with appropriate assistance, ZPD. The difference between ZPD and ZAD can determine the amount and type of assistance the individual may require to perform future tasks; therefore, underling his/her future learning potential. According to Poehner (2005), to measure learners' ZPD, we must first observe what they can perform independently, namely actual level of development, and compare it with what they can do when assisted, namely

proximal level of development. As Ellis and Barkhuizen (2005) state, ZPD emerges as a result of the individual collaboration with others and is not something which exists in the individual himself. Therefore, any mediation ought to be adjusted to the ZPD rather than ZAD in order to promote development and ripen a range of functions within the ZPD.

The notion of ZPD has potential relevance for assessment and this has led to the introduction of more and more systematic procedures integrating mediation into assessment (e.g. Haywood & Lidz, 2007; Khoshsima & Izadi, 2014). Dynamic Assessment (DA) rooted in Vygotsky's innovative insight that in the zone of proximal development instruction results in development and is employed to assess ZPD (Lantolf & Thorn, 2006). The notion of dynamic assessment was coined by Vygotsky's colleague Luria (1961) and it was Reuven Feuerstein who popularized it and tried to contrast it with other forms of assessment: static in his own terms (Feuerstein, Rand, & Hoffman, 1979). As for the definition of DA, Poehner (2007) comments "in DA, the traditional goal of producing generalizations from a snapshot of performance is replaced by ongoing intervention in development" (p. 323). Lantolf and Poehner (2004) sum up

dynamic assessment integrates assessment and instruction into seamless, unified activity aimed at promoting learner development through appropriate forms of mediation that are sensitive to the individual's (or in some cases a group's) current abilities. In essence, DA is a procedure for simultaneously assessing and promoting development that takes account of the individual's zone of proximal development. (p. 50)

There are two main models of DA. The first model, interventionist DA, is based on Vygotsky's quantitative interpretation of the ZPD as a 'difference score' (Poehner & Lantolf, 2005). The interventionist DA formally mediates learners through pre-test/treatment/post-test, namely sandwich format, or a set of pre-fabricated prompts provided item-by-item, namely cake format. The famous proponent of interventionist approach to DA was Milton Budoff. Budoff believed that comparisons between and within groups and making predictions about performance on future tests are the essence of any type of mediations. However, the second model, interactionist DA, is based on Vygotsky's qualitative interpretation of the ZPD. The interactionist DA engages in an open-ended qualitative collaboration between mediator and learner in which prompts/hints/feedbacks are not designed a priori but they arise from mediated dialogue. The famous proponent of interactionist approach to DA was Feuerstein. Feuerstein in his theory of Structural Cognitive Modifiability argues that while

genes determine characteristics as height and eye color, humans' cognitive abilities are not fixed traits, but rather they can be grown in different ways based on the presence and type of interaction and instruction they receive (Feuerstein, Rand, & Rynders, 1988).

Generally speaking, DA requires the examiner to mediate the examinee's performance during the assessment itself through the use of prompts, hints, and questions. In this way, the examiner analyzes the amount and kinds of assistance examinee requires instead of their success or failure at completing a given task. Among the features unique to this approach are the role of instructor as mediator of student learning and the mediation presented to assist individuals to mature their ZPD.

Mediation is indeed the most outstanding concept of the SCT. According to Lantolf (2000, p. 1), "the most important concept of sociocultural theory is that the human is mediated". It refers to acting upon the world through some sort of intervention. The intervention could be either physical or symbolic such as language, music, etc. In all DA procedures, mediation is offered and the person who provides this mediation is often referred to as the mediator. The mediator provides hints in a systematic way to help a learner perform a task that is within his/her ZPD, but which s/he cannot complete alone (Poehner, 2008). According to Vygotsky (1978), the mediator is someone who provides "guidance" (p. 86). Feuerstein et al. (1988) added to this definition that the mediator can promote development in individuals by instructing while assessing. The mediation that is offered can be standardized or non-standardized, based on the researchers' approach to DA

In addition to the importance of mediational moves during DA, it is also important to note how learners respond to mediation. Lidz (1987) stresses the importance of learner reciprocity, realizing the active role that learners can take in DA interactions. Before her research, the major focus was centered on the quality of mediation. Lidz points out that different learners respond to identical mediation prompts in varying ways, in varying quantities and in varying qualities. She referred to the importance of affect in DA interactions by claiming that learner's feelings toward a mediator can affect the learner's responsiveness and performance. In another study, Lidz (1991, p. 98) referred to the concept of reciprocity by pointing that "individuals differ in the ways they respond to the adult's input" and the fact that they "elicit different quantities and methods of help from that adult" (Van Der Aalsvoort & Lidz, 2002, p. 115).

Aljaafreh and Lantolf (1994) also refer to the significance of reciprocity by arguing that mediation must be contingent on learners' needs and it should be removed whenever learners

show signs of independent behavior, even if such behavior is not fully appropriate. Consistent with Aljaafreh and Lantolf (1994), those responsive moves that simply required implicit feedback were considered to be high in ZPD and hence, learners were on the brink of independent performance in these moves (Ableeva, 2010). On the other hand, learners' moves which required explicit mediation were considered to be the premature stages in the ZPD, so learners were not expected to perform independently in these moves.

In general, by offering mediation to the learner during the assessment, DA introduces a salient distinctive feature from other classroom assessment practices. However, the study of literature reveals that research employing this useful method on instruction and assessment of L2 listening comprehension has been quiet rare (Ableeva, 2010). Moreover, Poehner (2008) argued that in order to achieve top-quality mediation and to gain insights into learners developing abilities in the ZPD, mediator-learner interactional moves should become more predictable in the dialogic approach of DA. Accordingly, discovering patterns of teacher mediation and learner reciprocity acts in an interactionist model of DA on L2 listening comprehension will help educators be more prepared in mediating activities and take more systematized steps toward a better understanding of learners' potential level of development in specific context of situation. It will also help teachers to prepare themselves for the spontaneous situations of the interactional mediation. This way they can be directed to provide the optional feedback that is needed to engender learner agency in assessment practices of listening comprehension (Ableeva, 2010; Poehner, 2005).

Hence, in order to gain a better understanding of this facet, the researchers aimed to discover the patterns of mediation and learner's responses in listening comprehension to outline more systematized (but not standardized) interactions between mediator and learner in the interactionist DA. The patterns of mediation have been explored in a parallel study (Izadi, Khoshsima, Nourmohammadi, & Yarahmadzahi, in press) and the present research has focused on learner reciprocity. Importantly, the studies pursued the process of mediation with a focus on ability level (high and low proficient learners), an issue that has been missed in the current mediational typology.

In the following, the dominant responsive inventories will be explained. To better capture learners' responsiveness to the mediation, the related meditation inventories were also explained. Although Aljaafreh and Lantolf (1994) did not develop an inventory of responsiveness to characterize the learner's contributions to the interactions, their analysis of the sessions did lead to a regulatory scale of implicit or explicit tutor's assistance that was



outlined after the completion of the study. Through a close analysis of tutor-learner interactions, they identified twelve mediational moves performed by the tutor during the study sessions (see Figure 1)

- |     |   |
|-----|---|
| 0.  | Tutor asks the learner to read, find the errors, and correct them independently, prior to the tutorial.                                   |
| 1.  | Construction of a collaborative frame prompted by the presence of the tutor as a potential dialogic partner.                              |
| 2.  | Prompted or focused reading of the sentence that contains the error by the learner or the tutor.  |
| 3.  | Tutor indicates that something may be wrong in a segment (e.g., sentence, clause, line)-is there anything wrong in this sentence?         |
| 4.  | Tutor rejects unsuccessful attempts at recognizing the error.   |
| 5.  | Tutor narrows down the location of the error (e.g., tutor repeats or points to the specific segment which contains the error).            |
| 6.  | Tutor indicates the nature of the error, but does not identify the error (e.g., There is something wrong with the tense marking here.).   |
| 7.  | Tutor identifies the error (.You can't use an auxiliary here.).   |
| 8.  | Tutor rejects learner's unsuccessful attempts at correcting error.  |
| 9.  | Tutor provides clues to help the learner arrive at the correct form (e.g., .It is not really past but something that is still going on.). |
| 10. | Tutor provides the correct form.  |
| 11. | Tutor provides some explanation for use of the correct form.  |
| 12. | Tutor provides examples of the correct pattern when other forms of help fail to produce an appropriate responsive action.                 |

**Figure 1.** *Regulatory scale-implicit (strategic) to explicit (Aljaafreh & Lantolf, 1994, p. 471)*

In the same line, Poehner (2005) adhered to a clinical methodology, in that categories of mediation were drawn out from the interactions through a grounded analysis of each of the sessions and the mediator did not approach the interactions with a predetermined set of prompts or hints as in this way his ability to respond flexibly and appropriately to problems would have been contrasted in unacceptable ways. As with Aljaafreh and Lantolf's Regulatory Scale, "a general principle is discernable for organizing the kinds of mediation used, namely movement from the abstract/symbolic to the concrete" (Poehner, 2005, p. 159). Referring to Van Der Aalsvoort and Lidz (2002), Poehner (2005) argued that in studying the mediator-learner interactions attention should be given not only to the quality of the mediator's help but also to the learner's response to mediation. With this in mind, he constructed two inventories: 1. a menu of the mediator's moves and 2. a menu of learners' reciprocating moves. In the context of Poehner's study, the mediator's moves, reproduced in Figure 2, were intended to develop the learners' ability to use perfect-imperfect aspects in L2 French narratives.

- 
1. Helping Move Narration Along
  2. Accepting Response
  3. Request for Repetition
  4. Request for Verification
  5. Reminder of Directions
  6. Request for Renarration
  7. Identifying Specific Site of Error
  8. Specifying Error
  9. Metalinguistic Clues
  10. Translation
  11. Providing Example or Illustration
  12. Offering a Choice
  13. Providing Correct Response
  14. Providing Explanation
  15. Asking for Explanation
- 

**Figure 2.** Mediation typology (Poehner, 2005, p. 160)

The analysis of learners' moves in response to the mediation allowed Poehner (2005, p. 183) to create the learner reciprocity typology in which the moves were arranged according to extent to which each move represents the learners' ability to take on responsibility for their performance". The learners reciprocating moves from Poehner (2005) are presented in Figure 3 below.

- 
1. Unresponsive
  2. Repeats Mediator
  3. Responds Incorrectly
  4. Requests Additional Assistance
  5. Incorporates Feedback
  6. Overcomes Problem
  7. Offers Explanation
  8. Uses Mediator as a Resource
  9. Rejects Mediator's Assistance
- 

**Figure 3.** Learner reciprocity typology (Poehner, 2005, p. 183)

Following Poehner (2005), Ableeva (2010) provided two types of moves" 1. the mediator's strategies offered to the learners while working within their L2 listening ZPDs (Figure 2.5) and 2. the learner's responsive moves (Figure 2.6 and 2.7). In addition, similar to Aljaafreh and Lantolf (1994) and Poehner (2005), the menu of moves proposed was not outlined in advance but distilled as a result of close *doubled-side analysis* of the sessions during which teacher-learner dialogic interactions occurred. Description of the mediator's moves is presented in Figure 4.

- 
1. Accepting Response
  2. Structuring the text
  3. Replay of a passage; Replay of a segment (from a passage); Replay of a detail (from a segment)
  4. Asking the Words
  5. Identifying a Problem Area
  6. Metalinguistic Clues
  7. Offering a Choice
  8. Translation
  9. Providing a Correct Pattern
  10. Providing an Explicit Explanation
- 

**Figure 4.** *Mediational strategies (Ableeva, 2010, p. 260)*

Ableeva (2010) further added that though this figure “presents the identified mediator’s strategies arranged hierarchically from implicit to explicit, their use was not predetermined in advance and was adjusted to the quality of listening performance of each learner.” (p. 261). Learner’s regressive and progressive responsive moves related to the development of L2 listening ability identified in Ableeva’s study are presented in the following figure.

<b>Regressive Moves</b>	<b>Progressive Moves</b>
1. Unresponsive	1. Responsive
2. Provides negative response	2. Provides positive response
3. Makes a wrong choice	3. Makes a correct choice
4. Does not decipher a pattern or a word	4. Decipher a pattern or a word correctly
5. Does not overcome problem	5. Overcomes problem

**Figure 5.** *Learner regressive and progressive responsive moves within the ZPD (Ableeva, 2010, p. 282)*

In Figure 6, Ableeva (2010) highlighted the identified responsive moves that mirror learners’ self-initiated efforts to seek mediation in order to improve their listening performance.

- 
1. Requests a replay
  2. Uses mediator as an evaluator
  3. Uses mediator as a resource
  4. Imitates mediator
  5. Incorporates feedback
  6. Accepts mediator’s assistance
  7. Rejects mediator’s assistance (very rare occurrence)
- 

**Figure 6.** *Learner reciprocity typology (Ableeva, 2010, p. 283)*



## The Study

The study adopted an interactionist DA approach to assess the listening development of high and low proficient L2 learners of English and analyze the interaction between mediator and learners. The qualitative research methodology was selected to examine the type and frequency of mediator-learner's interaction. Then, quantitative analyses were run to explore the effect of ability level on the responsiveness of learners to mediation.

## Participants

Thirty Iranian female/male EFL learners (Upper-intermediate level=15, Advanced level =15) were taken as the sample of the study. In order to select the participants, a non-random purposive sampling method was applied. At first, the Oxford Quick Placement Test (OQPT) and the Interactions/Mosaic Listening Placement Test (IMPL) were administered in order to identify the participants who were at the upper-intermediate and advanced levels. Following that, the researcher participated in one of their regular classes in the institute and invited learners to participate in a listening comprehension class which would be held in two sessions. The purpose of the study was briefly explained and it was stated that the study aimed to investigate a new approach to assessing and improving learners' listening skill. It was also explained that the classes would be held in the form of individualized tutoring sessions. In this way, six advanced level and six upper-intermediate EFL learners who met the requirement of the language ability and could take the class based on the schedule of the study and institution volunteered to participate.

## Instruments

Two instruments were employed to conduct the study: Oxford Quick Placement Test (OQPT) and Interactions/Mosaic Listening Placement Test (IMLP). The OQPT is developed by Oxford University Press and Cambridge ESOL (2001) and has gone through Cambridge quality control procedures. It was used in this study to indicate the proficiency level of the learners before recruiting the participants. The test has two parts. The first part assesses learners on grammar and vocabulary items and the second part assesses learners on multiple choice items and cloze test. The test has been validated in 20 countries by more than 6000 students and has a reliability (internal consistency) value of 0.9. The Interactions/Mosaic Listening Placement Test (IMLP) is developed by the McGraw-Hill ESL/ELT College as a placement test (2008, McGraw-Hill Press) and was administered in this study to measure the

listening comprehension ability of learners before recruiting the participants and to choose the appropriate-level listening tests from the series of Interactions/Mosaic Listening/Speaking books for the participants of the study. The test consists of 50 questions in a multiple-choice format. Regarding the validity and reliability of IMLP, McGraw-Hill ESL/ELT College (2008) reported a high validity and reliabilities of 0.8 and above for the test.

### **Procedure**

The study adopted Poehner (2005) and Ableeva's (2010) DA-based investigation of L2 learners of French. First, 60 listening items (upper-intermediate=30, advanced =30) were extracted from the book Mosaic 1 (for upper-intermediate level) and the book Mosaic 2 (for advanced level). The reason we selected these books was that each book was appropriate for an ability level (upper-intermediate and advanced in this study). The listening items assess learners' listening comprehension abilities in terms of the sources of listening comprehension difficulty including phonological, lexical, syntactic, and contextual and cultural areas (see Ableeva, 2010; Alavi, Kaivanpanah, & Shabani, 2012; Poehner, 2005). The items were in form of multiple-choice type and tested the participants' ability to listen for the gist of a whole extract, for particular detail or the speaker's opinion, and making inferences about what they hear. To better serve the purpose of a DA test since the study aimed to allow learners' multiple attempts to respond to each item and to be offered mediation (if any), one additional distractors was added to each item, bringing the total number of choices per item to five. In this manner, for example, when learners re-attempt an item, the degrees of freedom will not be as limited as are the case in the more typical four-option format for multiple-choice questions. The content of the tests were also checked with two professors from Chabahar Maritime University. Given the changes made to these items, it is likely that the item characteristics may change from that appeared in the original test. Test piloting will, thus, help to specify item characteristics after the changes made. The tests were then piloted with 24 upper-intermediate and 24 advanced learners of English, having the same general characteristics as the participants in the study. The Cronbach's alpha revealed a high reliability of 0.83 and 0.82 for upper-intermediate and advanced levels, respectively.

Upon test preparation, the researcher then ran one-on-one tutoring classes for each individual per group. The DA of the learners of all ability levels of this study was in form of interactionist DA in which the mediation was not designed a prior and the feedback was neither excessively implicit nor explicit. In this way, learners listened to the audio and answered the item(s) individually; wherever they failed to answer correctly, the mediator

intervened and provided mediation. While the precise content of the moves differed across items, they each followed the same form of moving from most implicit to most explicit across all individuals. It should be noted that the mediation was provided in accordance with the specific context of mediator-learner interactions and the content of each item. The focus was on the aforementioned problematic areas and it attempted to help the individuals adopting Mendelsohn's (2006) approach to listening using learning strategies and Macaro's (2001) learning strategic cycle.

### Data Analysis

All mediator-learners' interactions were videotaped/audiotaped and transcribed to determine the type of learners' responses to the mediation. Thematic analysis (Guest, MacQueen, & Namey, 2012) was used to code the learners' responses as these could not be anticipated. Once all moves made by the learners of all ability levels were coded and categorized, they were counted and analyzed to indicate the quantity and quality of learner reciprocity happened throughout the DA intervention. Qualitative and quantitative comparisons were made between the two ability levels on how learners responded to the mediator's moves.

### Results and Discussion

Learner reciprocity, as Poehner (2005) stated, is the area which has often been missed in DA studies. According to Poehner (2008), the mediator-learner interaction entails careful consideration of the moves made by both mediator and learner. With this in mind, all kinds of moves made by learners in answering the listening text tasks were coded and analyzed. The typology of learner reciprocity indicates not only how learners responded to mediation but also their effort to actively request it and even reject it. Learners' moves comprised a continuum from the most extreme cases of unresponsiveness to the most independent performances. As Table 1 illustrates, response moves show the level of assistance learners require to complete a task. Accordingly, the moves in which learners take less responsibility and need more mediation come first while the moves in which learners take more responsibility and need less mediation appear next. Thus *imitating the mediator* (move 2) comes before *use the mediator as a resource* (move 5) because the latter requires more learner responsibility than the former. Just as the mediation typology was categorized according to the functions of presenting mediational strategies (Izadi et al., in press), the learner reciprocity is divided into five major functions:

1. responsiveness
2. self-regulation of attention
3. problem identification
4. self-evaluation
5. overcoming the problem

Learners may show different moves in order to full fill their aims and vise versa. However, certain trends in the provision of learner reciprocity are very clear. *Responsiveness* category showed the learners' most dependence on the mediator in which the learners were *unresponsive* (move 1) and/or *imitating the mediator* (move 2). These showed learners' inability to take on responsibility for their performance, however, "repeating a statement made by the mediator is a higher level of reciprocity than not responding at all because the former reveals that the learners have at least understood the mediation even if they are not able to use it independently to correct an error" (Poehner, 2005, p. 183). This does not mean that "learners who do not make any overt response to mediation could not have still benefited from it. However, without a subsequent verbalization or attempt to identify or overcome the problem, any immediate effect of the mediator's move cannot be known" (Poehner, 2005, p. 183). Subsequently, learners regulated their attention in order to make some attempts to incorporate the mediator's prompts into getting along with the task. For example, *seeking the mediator's assistance* (move 4) and *operating on a feedback* (move 9) showed even greater reciprocity because such moves imply not only that learners had understood mediation but also that they were aware that the assistance was not sufficient for them to answer the task, and so they turned to the mediator and asked for additional forms of help. In this way, the learners took on even more responsibility for the performance because, rather than responding to mediation by producing an incorrect form, they asked for additional assistance and/or took advantage of the mediator's implicit feedback on an erroneous response to overcome the problem. The range of moves continues to the higher levels, where learners were able to identify the problem, and to a greater degree, had taken over responsibility to evaluate their performances. For example, *self-assessing* (move 14) represented the learners' self-initiated attempts to elucidate and rationalize their responses through assessing. In this move, the learners were eager to provide reasoning for their responses and to give details on how they arrived at a certain conclusion with/without mediator's hints to answer the task. The last remaining strategy offered the most independent response overcoming the problem. This move is considered as an outstanding step toward self-regulation since the learners showed their level of development by overcoming the task.

**Table 1.** Type, mean, standard deviation, and effect size of learner reciprocity

	Advance	Upper- intermediate	Cohen's d
	Mean (SD)	Mean (SD)	
<b>Responsiveness</b>			
1. unresponsiveness	2.66 (1.21)	4.50 (1.87)	
2. imitating the mediator	1.83 (1.47)	3.00 (.89)	
<b>Self-regulation of attention</b>			
3. requesting a replay	21.00 (1.26)	26.50 (1.87)	-3.44
4. seeking the mediator's assistance	1.33 (1.03)	2.50 (1.76)	
5. use mediator as a resource	4.83 (1.16)	6.16 (1.47)	
6. use mediator as an evaluator	5.66 (1.86)	6.50 (1.04)	
7. checking conceptual understanding with mediator	1.00 (.81)	7.66 (1.21)	-6.46
8. asking for content clues	7.33 (1.21)	1.66 (.81)**	5.50
9. operating on a feedback	3.00 (1.78)	4.50 (1.04)	
10. making guesses or inferences	8.16 (1.16)	2.00 (1.41)**	4.77
<b>Problem identification</b>			
11. identifying the problem	6.66 (1.03)	5.33 (1.75)	
12. explaining the problem	4.16 (1.47)	3.66 (1.36)	
<b>Self-evaluation</b>			
13. evaluating the mediator feedback	1.16 (1.16)	2.83 (.75)**	-1.70
14. self-assessing	7.83 (.98)	2.83 (.75)**	5.72
15. verbalizing conceptual understanding	1.00 (1.26)	8.16 (1.60)	-4.97
16. rejecting the mediator's feedback	3.33 (1.86)	2.50 (1.04)	
<b>Overcoming the problem</b>			
17. overcoming the problem	18.50 (1.04)	17.00 (1.41)	
<b>Total</b>	100.16 (6.85)	107.33 (2.25)*	-1.40

SD=Standard Deviation

\* Differences between the mean scores of upper-intermediate and advanced learners were significant at  $p \leq .05$ .\*\* Differences between the mean scores of upper-intermediate and advanced learners were significant at  $p \leq .01$ .

Table 1 also demonstrates the descriptive statistics of learners' responses to the mediation. The mean number of learner reciprocity revealed that advanced level learners showed an average of 100.16 ( $SD=6.85$ ) of responses, while upper-intermediate level learners showed an average of 107.33 ( $SD=2.25$ ) of responses. The results of independent-samples *t*-test indicated that this difference in the number of learners' moves was significant ( $t(10)=-2.43$ ,  $p < 0.05$ ) and Cohen's effect size value ( $d = -1.40$ ) suggested a high practical significance. It shows that upper-intermediate learners responded more to mediation and demonstrates their effort to actively seek it and/or refuse it. Regarding the higher proportion of mediation that upper-intermediate learners received (Izadi et al., in press), such a high degree of moves made by them is plausible. With respect to the five main types of



responsiveness of learners to mediation, results of the two-way ANOVA revealed Ability Levels (upper-intermediate learners, advanced learners)  $\times$  Functions of Learner Reciprocity (responsiveness, self-regulation of attention, problem identification, self-evaluation, overcoming the problem) interaction was significant at  $F(4, 50)=4.39, p<0.01$ . Holm's Bonferroni approach was used to control family-wise error. The results of follow-up t-tests revealed that there were significant differences in the reciprocity moves of responsiveness ( $t(10)=-2.50, p<0.05, d=-1.45$ ), and self-evaluation ( $t(10)=-2.87, p<0.01, d=-1.66$ ) between the upper-intermediate and advanced level learners. However, no significant differences were found in reciprocity moves of self-regulation of attention ( $t(10)=-1.83, ns$ ), problem identification ( $t(10)=1.38, ns$ ), and overcoming the problem ( $t(10)=2.08, ns$ ) between the upper-intermediate and advanced level learners.

Regarding each type of learner reciprocity, Table 1 also revealed that *Requesting a Replay* was the most frequent responsive move made by the learners at the two ability levels ( $M=21.00, SD=1.26$  for advanced and  $M=26.50, SD=1.87$  for upper-intermediate learners). A significant difference was also detected between the two groups ( $t(10)=-5.96, p<0.01, d=-3.44$ ). It shows learners highest dependence on the mediator because of which they asked for a reply in order to reconsider their performances. Likewise, some moves such as 17 (overcoming the problem), 10 (making guesses or inferences), 14 (self-assessing) and 8 (asking for content clues) were more frequent in advanced group and 17 (overcoming the problem), 15 (verbalizing conceptual understanding) and 7 (checking conceptual understanding with mediator) were more frequent in upper-intermediate group. Except move 8 (asking for content clues) and 7 (checking conceptual understanding with mediator) which showed the dependent attempt of upper-intermediate and advanced learners respectively, the large amount of these learners' moves (i.e., 17 and 15 for upper-intermediate and 17, 10, and 14 for advanced learners) suggest that the learners were less dependent where possible when moves 1-8 are considered dependent and moves 9-17 independent. For example, in case of move 10 (making guesses or inferences), the mediator recurrently was encouraging the learners to make intelligent guesses of the meaning of certain elements in the text. As a response move to this mediational strategy, learners resorted to the contextual clues and incomplete information from time to time to infer the meaning of the specific parts of the text or guess the meaning of the isolated lexical items. However, they were advised to avoid wild guesses by justifying their speculation along with the information given in the text. In extract below, it is indicated how learner makes use of guessing to arrive at a proper answer.

1. M: what are the problems students may have?
  2. L5: problems with attendance.
  3. M: yes ..... anything else?
  4. L5: (checks her notes) ... deadline.
  5. M: yeah.... but deadline of what?
  6. L5: deadline of an essay.
  7. M: yeah ... but what is the problem?
  8. L5: [silence]
  9. M: ok, listen.
- Replay a segment of the text
10. L5: can't meet a deadline for an essay.
  11. M: what does it mean?
  12. L5: (she speaks in her L1) tarikhe taen shodeye yek projeh ... kare kelasi ....mmmm....
  13. M: No ... meet a deadline .... can you guess?
  14. L5: aha...masalan (she speaks in her L1) finish your essay on time ... for example by the end of the term.
  15. M: yes ... complete your essay on time .... like end of the term. And what is the problem of students here?
  16. L5: they cannot finish their essays on time.
  17. M: Excellent.

As another example, move 6 (use mediator as an evaluator) was made by the learner prior to looking for the mediator's verification of it. This move was to some extent more independent than seeking for mediator's assistance since in this case the learner had already made some attempts to overcome the task regardless of the accuracy of the outcome. However, the mediator offered more explicit feedback when the response was only partially acceptable. The extract below captures mediator-learner interactions at the upper-intermediate level. In this extract, the learner (L) did not correctly understand the number of patterns in the nature.

1. M: how many patterns are there in the nature?
2. L3: he talked about ...eh...two numbers.
3. M: What were they?
4. L3: seven and four.
5. M: how many patterns are in NATURE ...which number you think is the correct answer.

6. L3: I guess the answer is seven....because....he wants to talk about four...but...in nature...there are seven? [not sure]
7. M: exactly...there are seven but they just study
8. L3: four of them.

Here, the learner was undecided between two numbers. Although she finally picked the right answer by mediator's (M) prompts, she still showed hesitation about it. It is obvious that she was trying to find teacher's confirmation of her response as she replied "there are seven" in the question form.

On the other hand, *checking conceptual understanding with mediator* ( $M=1.00$ ,  $SD=0.81$ ) and *verbalizing conceptual understanding* ( $M=1.00$ ,  $SD=1.26$ ) were the least frequent moves by the advanced level and *asking for content clues* ( $M=1.66$ ,  $SD=0.81$ ) was the least frequent moves by the upper-intermediate level learners. Significant differences were also found between upper-intermediate and advanced learners on the moves of *checking conceptual understanding with mediator* ( $t(10)=-10.06$ ,  $p<0.01$ ,  $d=-6.46$ ), *verbalizing conceptual understanding* ( $t(10)=-8.60$ ,  $p<0.01$ ,  $d=-4.97$ ), and *asking for content clues* ( $t(10)=9.50$ ,  $p<0.01$ ,  $d=5.50$ ). These findings confirm that the advanced learners have problem with hidden meaning within the listening text and attempt to overcome the task by seeking about the content clues. By the same token, the upper-intermediate learners have problem with structural properties of listening tasks and accordingly ask about the conceptual clues within the test (see Izadi et al., in press). The extract below is an example from the advanced group who asked for the content clues to overcome the task.

1. M: what else?
2. L2: for Americans, it is a sign of love.
3. M: yes, and for Vietnamese?
4. L2: em.....for Vietnamese...em...
5. M: how do they think about a person's head?
6. L2: that...that a person's soul is inside his head.
7. M: good, how do they think of putting a child on the head?
8. L2: ....they ... chetor mitunam begam chon fek mikonan ke (he speaks in his L1)... a ..a person's soul is inside his head....behamin khatar barashun tarsnake (he speaks in his L1)?
9. M: you should use a connective word to show the relationship between the two sentences. For example, you can say since+ your first sentence and hence+your second sentence (mediator wrote pattern on the board)

10. L2: em....since they think that a person's soul is inside his head, ....em .....hence it is terrifying for them to put a child on the head.

11. M: good.

## Conclusion

Aside from the mediational strategies, delving into participants' rejoinders was another indispensable source to keep the track of learners' moves in the zone of proximal development. By way of the microgenetic analysis, an inventory of learner's responsive moves stemmed mainly from their reaction to the mediational strategies. The analysis of the responsive moves was fundamental in that they mirrored learners' developmental levels throughout the procedure. Learners' moves in this pattern are at different levels of reciprocity. For instance, *use mediator as a resource* is at a higher level of reciprocity compared with *imitating the mediator* since the former shows learner's attempt to take the responsibility for solving the problem. Basic imitations were regarded as lower level reciprocity moves, while independent explanations manifested the ultimate cases of self-governing responsiveness.

In this study, 17 reciprocity moves were distinguished which, in keeping with Poehner (2005) and Ableeva (2010), were arranged corresponding to their level of dependency to mediator's additional support. Thus, the initial items in reciprocity inventory such as *requesting a replay* and *use mediator as a resource or an evaluator* revealed learners' reliance on the mediation owing to not full matured processes in the ZPD. Contrariwise, the last items in this inventory such as *self-assessing* and *verbalizing conceptual understanding* covers those processes in the ZPD that were developed enough to propel the learner in producing the satisfactory response without any supporting attempts. *Rejecting the mediator's feedback* for instance was considered as a remarkable move which showed the learner's predisposition to overcoming a problem independently, though it might lead to an erroneous outcome. According to the findings, it was revealed that the learners were considered independent as they required less support. The study also revealed that upper-intermediate learners responded to mediation more as compared to advanced learners. Of these amount of reciprocities, upper-intermediate learners' responses mostly were related to the syntax and structure of the language, whereas the advanced learners' responses were concerned with the function and semantic of the language and the implied meanings or message embedded in the utterances or texts heard.

The typology of learner reciprocity developed for the learners in this study is to some extent similar to the Poehner (2005) and Ableeva (2010) in which one-to-one DA procedures were used to assess and promote listening; however, a number of discrepancies are seen between them. In a comparison of reciprocity moves in this study with Poehner (2005) and Ableeva's (2010) responsive move inventory, we can observe that apart from *respond incorrectly* from Poehner and *accept mediator's assistance* from Ableeva's inventories, the other moves from Poehner and Ableeva's were mentioned in the inventory in this study. It is worth noting that levels that each inventory has allocated to the corresponding moves relatively fluctuate. For instance, in Poehner's inventory *use mediator as a resource* is located nearly at the end of the inventory, whereas in the present reciprocity pattern it is the fifth response learners show concerning their dependency on the mediator. On the other hand, similar to Poehner's typology and dissimilar to Ableeva's, the present typology includes learner's regressive moves as well. Besides, other moves such as *self-assessing* were identified and listed. It is conceivable that even in learners' unresponsiveness some kind of development might exist. Thus, the present pattern of learner's reciprocity is more or less compatible with the previous DA-based study on L2 listening comprehension (Ableeva, 2010, Poehner, 2005). This resemblance obviously stems from the implementation of the same DA approach (i.e. interactionist DA) in investigations on the similar language development in these studies. The similarity of some of learners' moves in these studies might be indicative of the fact that the realization of learners' development in ZPD has not differed much in a group with a different language proficiency level. However, the type and frequency of certain responsive moves show divergence in different proficient groups. This can be a thought-provoking subject to be discussed more in the future DA investigations.

The present study can shed light on the effects and characteristics of dialoging within the interactionist DA framework as the responsive pattern of interaction were taken out to enrich the literature in this area (e.g. Ableeva, 2010; Aljafreh & Lantolf, 1994; Poehner, 2005). DA teachers can take advantage of learner reciprocity typology to have better picture of how learners react to mediation and prepare themselves to help them with respect to their proficiency levels. Moreover, this study opted for the microgenetic analysis that tracked learners' development all the way through the DA procedure. On the whole, DA is an approach that underscores developmental processes in the ZPD. As a result, it turned out to be a perfect response to teachers' serious concerns in this regard.



## References

- Ableeva, R. (2010). *Dynamic assessment of listening comprehension in L2 French* (Unpublished doctoral dissertation). The Pennsylvania State University, University Park, PA.
- Alavi, S. M., Kaivanpanah, S., & Shabani, K. (2012). Group dynamic assessment: An inventory of mediational strategies for teaching listening. *The Journal of Teaching Language Skills*, 3(4), 27-58.
- Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal*, 78(4), 465-483.
- Ellis, R., & Barkhuizen, G. (2005). *Analysing learner language*. Oxford: Oxford University Press.
- Feuerstein, R., Rand, Y., & Hoffman, M., B. (1979). *The dynamic assessment of retarded performers: The learning potential assessment device, theory, instruments, and techniques*. Baltimore, MD: University Park Press.
- Feuerstein, R., Rand, Y. & Rynders, J.E. (1988). *Don't accept me as I am. Helping retarded performers excel*. New York: Plenum.
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. Thousand Oaks, CA: Sage.
- Haywood, H. C. & Lidz, C. S. (2007). *Dynamic assessment in practice: Clinical and educational applications*. Cambridge: Cambridge University Press
- Izadi, M., Khoshsima, H., Nourmohammadi, E., & Yarahmadzahi, N. (in press). Mediational strategies in a dynamic assessment approach to L2 listening comprehension: Different ability levels in focus.
- Khoshsima, H., & Izadi, M. (2014). Dynamic vs. standard assessment to evaluate EFL learners' listening comprehension. *Iranian Journal of Applied Language Studies*, 6(2), 1-26.
- Lantolf, J. P. (Ed.). (2000). *Sociocultural theory and second language learning*. Oxford: Oxford University Press.
- Lantolf, J. P., & Poehner, M. E. (2004). Dynamic assessment of L2 development: Bringing the past into the future. *Journal of Applied Linguistics*, 1(1), 49-72.
- Lantolf, J. P., & S.L. Thorne. (2006). *Sociocultural theory and the genesis of second language development*. Oxford: Oxford University Press.

- Lidz, C. S. (Ed). (1987). *Dynamic assessment: An international approach to evaluating learning potential*. New York: Guilford.
- Lidz, C. (1991). Issues in the assessment of preschool children. In B.A. Bracken (Ed.), *The psychoeducational assessment of preschool children* (pp. 18-31). Boston: Allyn & Bacon.
- Luria, A. R. (1961). Study of the abnormal child. *American Journal of Orthopsychiatry: A Journal of Human Behavior*, 31, 1–16.
- Macaro, E. (2001). *Learning strategy in foreign and second language classrooms*. London: Continuum
- Mendelsohn, D. (2006). Learning how to listen using learning strategies. In E. &. Uso-Juan, *Current trends in the development and teaching of the four language skills* (pp. 52-65). Boston: Heinle & Heinle.
- Poehner, M. E. (2005). *Dynamic assessment of oral proficiency among advanced L2 learners of French* (Unpublished doctoral dissertation). The Pennsylvania State University, University Park, PA.
- Poehner, M. E. (2007). Beyond the test: L2 dynamic assessment and the transcendence of mediated learning. *The Modern Language Journal*, 91(3), 323-340.
- Poehner, M.E. (2008). *Dynamic assessment: A Vygotskian approach to understanding and promoting second language development*. Berlin: Springer.
- Poehner, M. E., & Lantolf, J. P. (2005). Dynamic assessment in the language classroom. *Language Teaching Research*, 9(3), 233-265.
- Van der Aalsvoort, G. M., & Lidz, C. S. (2002). Reciprocity in dynamic assessment in classrooms: Taking contextual influences on individual learning into account. *Learning Potential Assessment and Cognitive Training: Actual Research and Perspectives in Theory Building and Methodology*, 7(1), 111-144.
- Vygotsky, L. (1978). Interaction between learning and development. *Readings on the Development of Children*, 23(3), 34-41.