Dynamic assessment: A more comprehensive approach to interpret and capture L2 listening comprehension development

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Abstract
Grounded in Vygotsky’s socio-cultural theory (SCT) of cognitive development (Vygotsky, 1978), this study seeks to reconcile the assessment and instruction dualism and integrate them to a single unified entity. Dynamic Assessment (DA) allows the teacher/mediator to capture and develop both the actual and potential zones of the development. Twenty eight TEFL students, ranging in age from 18 to 20, at Imam Khomeini International University (IKIU) participated in this study. Microgenetic analysis, a key sociocultural method, and idea unit analysis were used to reveal the frequency and quality of mediational moves across the assessment sessions. The findings of the study indicate that, through interactions in the zone of proximal Development, DA allows not only to establish the actual level of learners’ listening ability but also to diagnose/assess the potential level of their listening comprehension, while at the same time promoting their comprehension. The analysis of the DA-based interactions led to the generation of an a posteriori list of mediational strategies considered useful for classroom-based assessment and instruction. Finally, this study advocates the application of DA procedure in instruction and assessment contexts to provide a more valid assessment of L2 learners’ listening proficiency and promotion of abilities in the state of ripening.

Keywords: Listening comprehension; socio-cultural theory; dynamic assessment; zone of proximal development; mediational strategies
I Introduction

Listening can be considered one of the most commonly used communicative activity in daily life. Listening comprehension lies at the heart of L2 learning; however, it appears that it is the least researched language component. Conducting research in L2 listening is mandatory since a more comprehensive understanding of listening comprehension process will shed light on language learning pedagogy. Listening can also help learners develop other skills and make overall success in foreign/second language learning (Vandergrift, 2007). Listening is thought to be an active skill and requires an active participation of the listener in the task. According to Zielinski (2008), the listener should not be considered the speaker’s ‘silent partner’ anymore. Some language learners may perceive listening as the most difficult language skill to master (Graham, 2003; Hasan, 2000; Kim, 2002). Consequently, they may view it as a source of anxiety (Elkhafaifi, 2005). This anxiety may be due to the implicit and transient nature of the acoustic input and the difficulty in comprehending the process of decoding the input.

Listening comprehension is an extremely complicated process measuring which requires an understanding of how this process works (Buck, 2001). Unfortunately, traditional tests which were once popular because of their high psychometric properties of validity, reliability, and generalizability failed to demonstrate test takers’ individual differences and their underlying abilities (Ableeva, 2010; Aljaafreh & Lantolf, 1994; Lantolf & Poehner, 2008; Poehner, 2005). For some time now, a new surge of interest has been felt among testing experts to set out a new testing procedure to tap into the more dynamic aspects of learners’ underlying abilities. It has been shown that dynamic assessment (henceforth, DA) provides a more humanistic approach to the instruction and assessment of learners’ abilities. Moreover, DA requires more interaction and provision of more feedback; therefore, it makes the second language classrooms more interactive and authentic (Lantolf & Poehner, 2004; Lantolf & Poehner, 2008). In addition, the information that is gained through listening would be remembered for a long time. DA can help us not only diagnose and overcome learners’ problems but also evaluate their proficiency (Lantolf & Poehner, 2008; Poehner, 2005).

Although many researchers have endeavored to apply DA in L2 studies, it is still believed that DA has not received the attention it really deserves (Ableeva, 2010; Aljaafreh & Lantolf, 1994; Poehner, 2005). More studies should be conducted within the framework of DA to depict the true potentials of this approach to assessment. DA is an emerging field and, as Poehner (2008) contends, requires ample research to consolidate its basis and prevail it to all educational settings since it is a more humanistic approach to both instruction and assessment. It is a method to overcome the instruction-assessment dualism.

1 Theoretical origins of dynamic assessment

Understanding DA demands an acquaintance with its theoretical foundations. The notion of DA is historically rooted in Vygotsky’s Socio-cultural Theory (SCT) of Mind, a seminal, well-established theory in developmental psychology which offers the most vigorous account of mental development to date (Lantolf, 2008). Vygotsky’s SCT is founded on the basis of three seminal notions; 1) the prominence of developmental or genetic analysis as a means to understand certain aspects of mental functioning; 2) the claim that individual mental functioning has social genesis; and 3) the prominence of the mediated nature of human action (Wertsch, 1991).
Vygotsky’s SCT highlights that the origin of knowledge construction should not be sought in the mind but in the social interaction co-constructed between a more and a less knowledgeable individual (Lantolf, 2008). Moreover, the construction of knowledge is a socio-culturally mediated process influenced by the physical and psychological artifacts (Lantolf, 2004). Walqui (2006), while listing the basic notions underlying Vygotsky’s SCT, contends that the Zone of Proximal Development (ZPD) is the primary activity in which learning occurs.

Vygotsky proposed the notion of ZPD inspired by the fact that two children with the same IQ scores and chronologically at the same age benefited differently from the training sessions and that one could extremely outperform the other. He concluded that although the two children had the same biological age they were not intellectually the same age. He referred to the difference between the child’s biological age and intellectual age as the Zone of Proximal Development and defined it as “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. 85).

To further clarify the concept of ZPD, a distinction is made between Zone of Actual Development (ZAD) and ZPD. The former refers to learners’ independent performance ability, that is, what s/he can do alone without mediation. It indicates learners’ mental functioning that has become fully matured, ZAD. The latter refers to the higher level of learners’ mental functioning which emerges as a result of cooperation with a more significant/proficient individual. This ability is dependent upon the presence of another individual who provides the required auxiliary support. It reflects learners’ mental functioning that is in the state of maturation and ripening. In Poehner’s (2008) terminology, the concept of ZAD defines human abilities retrospectively, but the ZPD treats them prospectively.

Pozina (2001) suggests the major features of the concept of the ZPD. The ZPD (1) presupposes collaborative and interactive learning/teaching activities; (2) is individual and is associated with the capacities of a concrete individual; (3) is specific with respect to a subject matter which is amenable to appropriation; and (4) allows the identification of on-going changes.

2 Dynamic assessment

According to Lidz (1991), DA sketches a unified conception of instruction and assessment endeavoring to develop learners’ abilities through intervention and mediation. This advantage is nonexistent in the recent methods of assessment such as portfolio assessment, performance testing, and even formative assessment, let alone the traditional static testing practices (Poehner, 2008). It is because of the advantages that DA offers to the testing profession that since 2004, there has been growing support for the use of DA in language pedagogy (Ableeva, 2007, 2008; Lantolf & Poehner, 2004; Poehner, 2005, 2008; Poehner & Lantolf, 2005).

Lantolf and Poehner (2004, p. 50) define dynamic assessment as a procedure which “integrates assessment and instruction into a 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 (or group’s) zone of proximal development” (Lantolf & Poehner, 2004, p. 50).

Lantolf and Poehner (2004) distinguish interventionist from interactionist procedures to characterize two general orientations of DA. They view the interventionist (also named psychometric) approach to DA as a more formal and standardized approach, concerned with psychometric properties of test procedures. In their view, interventionist DA includes studies that outline and employ a pre-determined list of hints followed strictly during assessment activities in order to generate a weighted score. On the other hand, the interactionist (also named clinical) approach to DA implies that mediation emerges from the interaction between the examiner and the examinee. This kind of DA is characterized by dialogic or cooperative interaction (Poehner, 2005), based on the test taker’s needs, and the test taker is allowed to ask questions and receive immediate feedback.

II Literature Review

Dynamic assessment has recently been introduced to the field of applied linguistics, so the scarcity of research in this area encouraged the researcher to investigate the application of DA to the context of second language learning which is still in its infancy. DA has been researched in other fields of study such as mathematics, physics, etc.; however, applied linguists have only recently begun to investigate the pedagogical applications of it (Lantolf & Poehner, 2004; Poehner, 2005). This part provides an overview of the studies which have endeavored to apply DA in second language context.

Donato (1994) investigated the effect of collective scaffolding via speaking on L2 learners’ morpho-syntactic and lexical competency. He found that the scaffold established zones of proximal developments enabling the less capable learner to finally accomplish the task independently. He further found that during the interaction the learners were at the same time collectively experts and individually novices.

Schneider and Granschow’s (2000) study focused on the application of DA in L2 context is. They highlighted instructor-student interaction as a way to teach and assess students’ awareness of metalinguistic skills. They called for teaching learning strategies and helping students through self-discovery with leading questions and other verbal and non-verbal hints. They maintained that through interaction in the classroom and providing learners with metalinguistic awareness, L2 learners can be guided to develop the knowledge and skill necessary to improve their independent performance.

Another DA-based research is reported by Aljaafreh and Lantolf (1994) who investigated the effect of negative feedback and scaffolding on adult ESL learners’ development of English tenses, articles, prepositions and modal verbs. They applied a tutorial, one-on-one interactionist design. Throughout the assessment procedure, when the students failed to do the tasks or made errors, the tutor offered gradual feedbacks. They reported a significant development in the learners’ ZPD guiding them to independent performance.

Shopina (2003) investigated psychological particularities of cognitive development among 14-16 year-old normal learners. In order to identify the particularities and actualization of the ZPD, she gave the participants logic problems of various difficulties. She presumed that if the learner was able to solve the problem independently, the task fell within
the actual level of his/her development. If the learner had any trouble solving the problem independently, s/he was provided with help in five stages. She concluded that the inability to accomplish the task after being provided with the five stages of assistance indicated that the task fell outside the range of the learner’s ZPD.

Kozulin and Garb (2002) investigated the effects of DA on EFL text comprehension. Following an interventionist test-mediation-retest design, they assessed the students’ ability to learn and apply effective strategies during reading comprehension. First, the students performed on a static test. Then, the teacher went through the test with the students, mediating for them the strategies required in each item and teaching them how to transfer strategies from one task to another. Finally, the students’ performance on the posttest indicated how students benefited from the mediation. The results demonstrated that students with similar levels performed differently in the post-test.

Likewise, Gibbons (2003) applied a G-DA design to investigate the learners’ development in linguistic levels in English and the educational discourse and specialist understandings of the subject. The results of her study indicated that through mediation, the learners’ discourse became progressively more specialist. That is, the learners’ language became more formal and scientific.

Poehner (2005) conducted an interactionist procedure to examine the effect of DA on his learners’ oral proficiency. He intended to explore the effect of dynamic assessment on advanced L2 learners of French by asking the learners to make a past-tense narrative in French after watching a short video clip. During the pretest, learners received no feedback or mediation. Following the pretest, they were required to watch the same clip and repeat the same task. This time they were mediated by the teacher in the form of hints, suggestions, leading questions or prompts. During the mediation stage, Poehner noticed that although none of the learners was able to use past tense completely independently, their performance showed that their knowledge of the past tense was in the state of ripening. Following the mediation which included six weeks of tutoring, the participants were shown the same clip and were required to repeat the same narration task plus two transcendence (transfer) tasks to examine their performance in new contexts.

Ableeva (2010) focused on the application of dynamic assessment to the development of the learners’ listening ability. More specifically, she sought to rectify the current lack of diagnostic assessment in language instruction and the development of listening ability. Ableeva (2010) employed intermediate university students learning French as a foreign language and compared the results using DA and a traditional test of listening comprehension. The results of her study indicated that, through interactions in the ZPD, DA could establish not only the actual level of the participants’ listening ability but also diagnose/assess the potential level of their listening development, while at the same time promoting this development.

Shabani (2011) examined the development of EFL learners’ listening ability through G-DA interaction. He indicated that G-DA interactions could diagnose learners’ sources of listening difficulty and could also help develop those in the state of ripening. His qualitative analyses delineated that the ZPD of the entire class developed while the individual ZPDs were being constructed.
Ableeva’s (2010) study was conducted on one-on-one (individual) basis, but Alavi, Kaivanpanah, and Karimi’s (2012) study focused on a Group-DA based instruction on the co-construction of knowledge among L2 listeners. They were able to show that G-DA was conducive to more learning. Their qualitative analysis led to the development of an inventory of meditational strategies. They also showed how collective scaffolding (Donato, 1994) could establish distributed help among learners.

Shabani (2014) investigated the effect of dynamic assessment on the listening comprehension of EFL learners in transcendence tasks. The quantitative and qualitative analysis of his participants’ performance demonstrated that the NDA procedure failed to fully capture their underlying potential and disregarded the abilities in the state of ripening. He could also delineate the progressive trajectories of the participants towards higher levels of ZPD.

Despite the efforts made to apply DA in L2 studies, it is still believed that DA has not received the attention it truly deserves (Ableeva, 2010; Aljaafreh & Lantolf, 1994; Poehner, 2005). DA is an emerging field and, as Poehner (2008) contends, ample research is required to consolidate its basis and prevail it to all educational settings since it is realized as a more humanistic approach to both instruction and assessment.

Due to the importance and scarcity of DA based studies, this paper is aimed at investigating listening comprehension within the framework of dynamic assessment, grounded in Vygotsky’s Sociocultural Theory of Mind. This study also intends to unravel the potential applicability of DA in instructing and assessing listening comprehension on a one-on-one basis to explore the usefulness of this approach to improve second language listening ability. To achieve the realization of the goals delineated, the following research questions are formulated:

1. To what extent can DA capture the development of L2 listening comprehension among EFL learners?

2. What types of mediational strategies during DA sessions boost the listening comprehension of EFL learners?

III Methodology

The study adopted an interactionist DA approach and implemented a qualitative research methodology in which microgenetic analysis, a key sociocultural method, and idea unit analysis were used to reveal the frequency and quality, the two criteria to interpret the students’ developments and ZAD/ZPD functioning, of mediational moves across the assessment sessions. The microgenetic analysis of learners’ performances was conducted on the basis of two principles, i.e., the completion of the task and the amount and quality of mediation required for learners to comprehend the text. This type of analysis helped identify indications of development.

I Design of the study

A number of exemplary works (Ableeva, 2010; Aljaafreh & Lantolf, 1994; Poehner, 2005, 2009) guided the research design of this study. In this study, following Poehner’s (2005)
study, the mediation offered during the DA-based sessions was not determined *a priori* and was based on the specific context of mediator-learner interactions. The mediation was offered in a flexible mediator-learner interaction and included hints, prompts, questions, suggestions, and explanations determined by the mediator’s assumptions about learner needs and upon learners’ requests for mediation. In the light of Poehner’s (2009) study, the present study adopted a pre-test/enrichment program/post-test design. Furthermore, like Poehner’s (2005) and Ableeva’s (2010), this study follows a one-on-one mediator-learner tutoring format. The schematic representation of the design of the present study is presented in Table 1.

Table 1. The schematic representation of the design of the present study

<table>
<thead>
<tr>
<th>Week</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1-2</td>
<td>pretest (NDA + DA)</td>
</tr>
<tr>
<td>3-5</td>
<td>enrichment program (EP)</td>
</tr>
<tr>
<td>6-7</td>
<td>Post-test (NDA+DA)</td>
</tr>
<tr>
<td>8</td>
<td>transfer (transcendence)</td>
</tr>
</tbody>
</table>

2 Participants

The participants of this study (N=28) consisted of the first year students of TEFL and English Translation at Imam Khomeini International University (IKIU). They were typical Iranian undergraduate students, ranging in age from 18 to 20, who started their formal university education after finishing their high school. By departmental regulations, they were enrolled in a compulsory English language conversation course where they met twice a week.

3 Materials and instruments

Richards’ (2010) *Tactics for Listening* was used in this study. The book contains interesting and authentic texts and questions which are typical of most beginning or intermediate language courses. All the texts used in the study were authentic and similar in terms of topic, pace of delivery and level of difficulty. They were about spending weekends which naturally involved the use of past tense verbs perfect for the purposes of the study.

An NDA and DA pre-test were administered to glean more insights into the participants’ language learning background and help better interpret data obtained from the assessment sessions. After the enrichment program, the participants took part in an NDA and DA post-test reflecting the development the participants made during the enrichment program.

All the participants signed a consent form to indicate their approval to participate in the study. All the sessions were video and audio recorded. This amounted to approximately 70 hours of recordings. After the data collection, all the recorded data were studied, transcribed (as needed) and analyzed. Johnson’s (1995) conventions were used to transcribe the recorded data.

To measure the participants’ listening comprehension, this study applied immediate oral text recalls. The researcher (mediator) asked the participants to recall in English or in their L1 (Persian) the content of what they had just listened to with a special focus on the main ideas of the text. Participants were allowed to speak Persian during the mediation
process to avoid problems participants may have in expressing themselves or asking the questions they may not be able to do in English (Ableeva & Lantolf, 2011). Then, the researcher compared the participants’ recall against the idea units (IUs) of the original text. The recalls were scored against the list of IUs and only the information explicitly stated in the aural text was counted. Paraphrases were allowed because the participants could also produce the recalls in Persian, the participants’ L1. The number of recalled idea units was considered as evidence of text comprehension.

4 Procedure

28 freshmen participants studying TEFL and English Translation at IKIU were selected. They were approximately at the same level on the basis of their scores in the official nationwide university entrance exam. The participants performed on the pre-test texts first independently (NDA) and then dependently through mediational strategies (DA). In fact, the independent performances (IPs) indicated the participants’ actual level of development (ZAD) and the MPs (mediated performances) were indicative of the participants’ ZPD. The NDA elicitation stage served as a diagnostic procedure to gain insights into the students’ independent performance abilities. Upon the participants’ failure to provide correct answers, the researcher intervened and mediated in the participants’ understanding of the text providing some meditational strategies such as offering a choice, translation, asking the words, and replay of the passage. The decision to administer the NDA and DA simultaneously in the post-test sessions draws on Poehner’s (2005) suggestion that in DA it is not necessary to administer an NDA test separately since the DA procedure has the dual function of determining students’ ZAD and ZPD. Then, they received the enrichment program for three weeks. During the post-test sessions, which lasted for two weeks, they were presented with the post-test. Again they performed independently and dependently on the texts. In the end, the participants’ performance in the transfer sessions was observed to see whether they could apply what they obtained during the enrichment program and the DA sessions or not.

IV Results

The qualitative analysis of the exchanges was intended to reveal the participants’ process of listening comprehension. The analyses were conducted to investigate the effects of DA-based instruction comprising the effects of scaffolding and mediation as well as the vital role of different sources of information like syntactic, semantic, contextual and situational cues on the participants’ listening performance.

1 Mediational strategies in the zone of proximal development

This section examined how mediational strategies could affect the participants’ higher cognitive functioning. Moreover, the developmental processes of the participants were documented in their responsiveness to mediations that were finely tuned and calibrated to their ZPD.

Through the interactions, the mediator intended to offer the participants mediation to develop their listening potential. The analysis of the interactions between the mediator and the participants revealed the use of the mediational typology shown in Figure 1. Following Aljaafreh and Lantolf (1994) and Ableeva (2010), the list of mediational strategies provided here was arranged from the most abstract (implicit) to the most concrete (explicit). The
strategies were not developed *a priori* but emerged *a posteriori* based on the interaction between the mediator and the participants.

| 1. Confirming/rejecting response |
| 2. Replaying the entire part |
| 3. Providing different alternatives |
| 4. Indirect exemplification |
| 5. Repeating the erroneous guess questioningly |
| 6. Offering contextual clues |
| 7. Offering meta-linguistic clues |
| 8. Providing another context |
| 9. Guessing the first letter |
| 10. Using dictionary |
| 11. Providing correct response and explanation |

Figure 1. Typology of mediational strategies used in this study

2 Mediating the participants’ performance

As it is clear in the exchanges, what participants could not do individually in their IPs, which was indicative of their ZAD, was conveniently accomplished through the provision of meditational strategies. This is a proof for their potential development to higher ZPDs. Participants were allowed to speak Persian during the conversations to avoid problems participants may have in expressing themselves or asking the questions they may not be able to do in English (Ableeva & Lantolf, 2011).

In order to examine the effect of providing mediation and feedbacks on the comprehension of the participants, 3 samples of exchanges are presented here. These samples were chosen because they were representative of the whole strategies offered during the DA sessions.

As appeared in Figure 2, lines A2 and A6 indicate that the participant is not able to comprehend the sentence independently (IP) determining his ZAD. Therefore, the mediator should provide some strategies to scaffold his performance. In line A7, *indirect exemplification strategy*, and another context are offered to help him to construct the structure “Sunday morning”, which was successful. In line A9, two *different alternatives* are suggested to draw the participant’s attention to the correct form. The mediator’s *confirming response* is observed a couple of times in lines A11, A13, and A15. This strategy offers affective scaffolding (Wood, Bruner & Rose, 1976) through providing positive affective feedbacks such as ‘excellent’, ‘OK’, and ‘exactly’ to motivate the uncooperative participants to go on with the conversation. In line A13, the strategy *repeating the erroneous guess questioningly* is used to raise the awareness of the participant regarding the grammatical mistake in the sentence. In the same line, *meta-linguistic clues* are also offered to emphasize the significance of linguistic clues, in this case grammatical, in decoding the message. Another strategy, which is normally used more frequently than other strategies, is *replaying* observed in lines A2 and A14. This strategy helps the participant improve recall processing and notice the parts that are neglected in the first listening. Offering *contextual factors* is
another strategy which helps the participant use his background knowledge, world knowledge and topical (thematic) knowledge to comprehend the recording better. In line A15, the word “Sunday morning” helps the learner to understand the tense of the sentence.

**Protocol A**

[My brother and I wanted some exercise on Sunday morning.]

A1. T: What does it say?
A2. S: [silence] (after listening for three times)
A3. T: Listen again please.
A4. S: “my brother in I want some exercise on morning Sunday.”
A5. T: Do you think the sentence is OK?
A6. S: Yes (and he goes to the next sentence)
A7. T: You wanna say jome shab (Friday night) how do you say it in English?
A8. S: …. night Friday.
A9. T: Night Friday or Friday night?
A10. S: Friday night….
A11. T: OK… so if you wanna say …..
A14. S: Oh, “my brother and I” (after listening for two times)
A15. T: Very good. Now look at the verb. “my brother and I want some exercise on Sunday morning?” (emphasizing want and Sunday)
A16. S: Oh, it should be “wanted”……
A17. T: OK. Go to the next one.

Figure 2. Protocol A: Mediator-learner interaction on “My brother and I wanted some exercise on Sunday morning.”

Figure 3 indicates that the participant cannot make a distinction between “walk the long” and “walked along”, which is evident in line B2. Therefore, with the help of offering contextual clues strategy in lines B3 and B5, the mediator becomes successful in line B6. Meanwhile, the mediator’s confirming/rejecting response energizes the participant to maintain the conversation in lines B5, B8, B12, and B14. In line B8, Guessing the first letter helps the participant recognize and guess the spelling of the word he mistook for “rail”. Field (2004) found that trusting in the onset of the words was a reliable word recognition strategy. In line B10, the mediator takes advantage of another strategy called using a dictionary, which is clearly an explicit strategy. With the help of this strategy the participant is able to find the spelling and meaning of the word “trail” and learn a new word. Of course, this cannot be achieved without the help of contextual clues offered in B10. In line B12, the participant is helped to mention the determiner for “forest trail” using indirect exemplification strategy, and offering another context. Finally, replaying strategy is observed in lines B1, B9, and B13 to help him improve the recall processing and notice the neglected parts.
Protocol B
[We walked along a forest trail for about 4 hours.]

B1. T: What do you get? (after listening for three times)
B2. S: “We walk the long forest rail for about four hours”
B3. T: Considering the context of the sentence, what should the tense be?
B4. S: Past Tense. OK “walked”
B5. T: Great. Do we have “walked the long”? Is it grammatical?
B6. S: No, it should be “walked along”
B7. T: Because of the liaison, “walk the long” and “walked along” are pronounced the same. You should decide where the juncture is.
B8. T: Pay attention to the first letter of the word after forest. Does it start with /r/?
B9. S: No, it starts with /t/ (after listening for two times). I’m not sure about the spelling of /treI/?
B10. T: Check it in the dictionary. The meaning should be related to “forest”.
B11. S: I found it…… “trail” meaning a path.
B12. T: Excellent. Now, don’t you think that the word “trail” needs something? For example, you don’t say “teacher book” you say……
B13. S: Yes, it should be “a forest trail” (after listening for once)
B14. T: Good job. Now you can move on to the next sentence.

As can be seen in Figure 4, meta-linguistic clues are offered in Lines C2, C6, and C8 to provide greater levels of assistance through activating the required schemata. Meta-linguistic information including grammatical (subject, verb, noun, adjective, etc.) and lexical (idioms, collocations, etc.) cues exist in the text and provide support for the participant to solve listening comprehension problems. The mediator tries to motivate the participant to continue her interaction using confirming/rejecting response strategy in lines C6, C8, C12, and C20. In line C10, the mediator uses another strategy called guessing the first letter to help her to guess the adjective before “bird”. When no other technique (offering meta-linguistic clues and guessing the first letter) is useful in helping the participant, the mediator uses providing correct response and explanation strategy in line C16. This meditational strategy reflects the instructional function of DA. Since DA is aimed at helping students develop to higher levels of their ZPD through explicit teaching, this strategy is used whenever the participants cannot decode a word or structure. In C18, the participant’s performance is mediated with the help of using a dictionary. The use of this strategy was successful because besides developing to a higher level of ZPD, she learned a new word.
Figure 4. Protocol 3: Developing the ZPD of the participant through mediation.

As the three protocols indicate, what participants could not do independently in their IPs which was indicative of their ZAD was conveniently accomplished through the provision of meditational strategies. This is a proof for their potential and development to higher ZPDs. These exchanges also show that the mediator provided support for the participants to help them overcome problems they could never accomplish independently. Some of these strategies were taken from Alavi et al., 2012; some from Ableeva (2010); and some of the strategies were developed or improvised during the mediation sessions. As the protocols reported above delineate, the strategies were quite useful in helping the participants overcome their listening problems. In case none of the strategies were helpful, providing correct response and explanation strategy was offered since the ultimate goal of dynamic assessment is to instruct and help participants develop their ZPDs.

3 Frequency of mediator’s strategies in the ZPD

From an SCT perspective, the microgenetic developments in the participants’ ZPDs, resulted from the dialogic interactions between the mediator and the participants, can be inferred from the frequency counts of the mediational strategies offered during the assessment sessions.
(Aljaafreh & Lantolf, 1994; Poehner, 2005). Table 2 presents the frequency of the strategies offered by the mediator to the 28 participants during pretest, posttest, and TA sessions.

Table 2. Frequency of mediational strategies used in each text

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<th>T4</th>
<th>total</th>
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<tr>
<td><strong>Total MS in the TA</strong>: 695</td>
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Note: T=text, EP=enrichment program, MS=mediational strategy, TA=transfer assessment
MS1=Confirming/rejecting response; MS2=Replaying the entire part; MS3=Providing different alternatives; MS4=Indirect exemplification; MS5=Repeating the erroneous guess questioningly; MS6=Offering contextual clues; MS7=Offering meta-linguistic clues; MS8=Providing another context; MS9=Guessing the first letter; MS10=Using dictionary; MS11=Providing correct response and explanation

A comparison of the frequency of mediational strategies offered during the assessment sessions uncovers the microgenetic development of the participants’ ZPD. The core assumption underlying DA procedure is that the participants’ reduced demand for external mediation is an essential indication of self-regulation, independent performance and, hence, cognitive development (Poehner, 2008). Table 2 confirms this assumption as it indicates a dramatic drop in the use of mediational strategies from the pre-test (1465) to the post-test (577). It can also be observed that the frequency of explicit strategies declined dramatically and the mediator relied mostly on implicit types of mediation. Another interesting point about the data presented in Table 2 is that MS1, Confirms/rejecting response strategy, being the most implicit strategy, was the most widely used strategy among the other ones. This reduced mediation on the part of the mediator from the pre-test to the post-test sessions indicates the extension of the participants’ ZPD to higher levels and confirms the findings of previous research in this regard (Ableeva, 2010; Aljaafreh & Lantolf, 1994; Poehner, 2005; Shabani, 2011). Figure 5 illustrates this decrease better. As can be seen, the number of mediational strategies rose to 695 in TA sessions. This is because the texts in TA were difficult for the participants and required more support from the mediator. The texts were more difficult in that they were less redundant and the participants were less familiar with the topics. It is noteworthy that the frequency of strategies in the TA texts
reflects the participants’ ability to deal with a series of innovative and increasingly complex texts. An additional sign of evidence for the participants’ developed ZPD can be traced in the prevalence of implicit mediations in the TA sessions. The development is corroborated by the low frequency of explicit mediations and high frequency of implicit mediations in the TA sessions. An additional sign of evidence for the participants’ developed ZPD can be traced in the prevalence of implicit mediations in the TA sessions.

Figure 5. Comparison of mediational strategies in the pre-test, post-test, and TA sessions

V Discussion

This paper aimed to address the concerns articulated in L2 listening research and add to the body of knowledge on L2 listening processes through conducting a DA-based approach to listening assessment. Attempt was also made to illustrate how listening comprehension could be promoted through DA within the ZPD.

A qualitative analysis of the interactions between the participants and the mediator and different types of mediational strategies offered during the interactions was presented. The microgenetic gains of the participants were illustrated in the exchanges presented in the result section. This section provided a fair number of examples demonstrating that in many cases the learners were unable to display their L2 knowledge during the independent stage conducted non-dynamically but could overcome the identified problem areas after having received implicit or explicit assistance offered by the mediator. The participants’ developmental trajectories were tracked mainly through observation of 1) reduced demands for external mediation in the post-test and TA sessions and 2) a tendency towards self-regulated and independent performance by relying upon more implicit types of mediation in the TA tasks.

The results of this study were in line with the previous research on DA-based studies in listening comprehension (Ableeva, 2007, 2008, 2010; Ableeva & Lantolf, 2011; Alavi et al., 2012; Poehner, 2008, 2009; Shabani, 2011). The findings were also in concert with the
other studies investigating speaking, grammar, and reading comprehension within the framework of DA (Donato, 1994; Gibbons, 2003; Kozulin & Garb, 2002; Poehner, 2005; Shopina, 2003). All the research conducted in this field unanimously found support for the application of DA in different fields of applied linguistics.

VI Conclusions

This study makes several contributions to three under-researched areas of SCT-based L2 studies, DA-based studies and L2 listening studies. The findings of this study also contribute to L2 pedagogy by providing insights into the acquisition processes that can inform the L2 listening methodology.

This study also makes two important contributions to DA-based research within SCT, namely the design of DA studies and the provision of mediation during a DA procedure. The research design of this study involved the use of transfer sessions in order to track the development of listening potential over time and through unfamiliar situations and contexts. Another contribution that this study makes regarding DA methodology is related to offering mediation. As noted by the researchers working within the psychological DA framework, offering mediation is one of the most daunting features of DA-based studies (Haywood & Lidz, 2007).

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

References


