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EDUCATIONAL ASSESSMENT & EVALUATION | RESEARCH ARTICLE

Developing EFL learners' speaking skills through dynamic assessment: A case of a beginner and an advanced learner

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Abstract: Dynamic assessment (DA), having its theoretical base in Vygotskyan Sociocultural theory of mind, is a newly developed classroom assessment through which learners are helped to perform beyond their current ability. Drawing upon the theoretical aspect of DA, the present study explored the impact of DA on the development of speaking skills. To this end, a beginner and an advanced English language learner were recruited for the present study. To collect the data, the participants narrated a set of picture stories during which they received mediation based on their Zone of Proximal Development (ZPD). Microgenetic and thematic analysis as a data analysis framework was employed to identify any possible changes in the participants' cognition development. Moreover, the participants' private speech was considered as an index of their movement toward self-regulation. The findings revealed a significant development in the participants' cognition and their movement toward further self-regulation. Furthermore, the results of thematic analysis of unstructured interviews showed their satisfaction with DA. The findings of the study call for teachers' and materials developers' attention to learners' individualized needs which require tailored mediation to help them move forward toward further self-regulation.

Subjects: Language & Linguistics; Applied Linguistics; Language Teaching & Learning

Keywords: dynamic assessment; private speech; Zone of Proximal Development; self-regulation; speaking skills

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PUBLIC INTEREST STATEMENT

In this research study, we show that how individuals with different language proficiencies demanded for different mediations. Furthermore, the study put the spotlight on their responsiveness to mediation and their private speech during task performance. The findings revealed that tailored mediation resulted in the development of the participants' speaking skills. This is significant because it calls for teachers' and materials developers' attention to learners' individualized needs which require tailored mediation to help them move forward toward further self-regulation.

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1. Introduction

Dynamic assessment (DA) can be traced back to Vygotsky's Zone of Proximal Development (ZPD) in which mediation plays a central role (Poehner & Lantolf, 2003). Pohner and Lantolf posit that higher level of thinking emerges as a result of interaction with individuals and symbolic and physical artifacts. More specifically, DA exerts emphasis on dialogic interaction between a teacher and students (Poehner & Infante, 2016).

In essence, DA capitalizes on the interaction between a teacher and language learners. That is, the teacher intervenes in order to provide the language learners with sufficient assistance to complete a task (Poehner & Lantolf, 2003). This characteristic makes DA potentially appropriate for assessing and assisting language learners to develop their speaking skills as speaking is by nature an interactive process (Son & Kim, 2017) and can be learned through interaction (Willis, 2015). The ability to use a language for oral communication is regarded by many as an ultimate goal of language learning since speaking is the main means of human communication (Lazarton, 2001), which can be affected negatively by two main conditions namely, time pressure and reciprocity conditions (Bygate, 1987). Brown (2001) also states that speaking skills are composed of a number of sub-skills one of which is correct use of grammatical rules, hence the concept of accuracy, something which has partly been addressed in the present study.

Despite the fact that there is an array of studies addressing DA-based reading (e.g. Kozulin & Garb, 2002), writing (e.g. Shrestha & Coffin, 2012), and listening skills (e.g. Hidri, 2014), it seems DA has not sufficiently been employed to enhance language learners' speaking skills (e.g. Hill & Sabet, 2009; Son & Kim, 2017). This gap in the literature, therefore, was part of driving force behind conducting the present study. Further incentive for carrying out the study rooted in lack of research on the comparison between beginners' and advanced language learners' speaking performances using DA.

2. Theoretical framework

DA was coined by Luria, Vygotsky's colleague, and developed by an Israeli scholar, Feuerstein (Leung, 2007; Poehner, 2007; Poehner & Lantolf, 2005). ZPD proposed by Vygotsky, at the heart of which mediation exists, underpins the theoretical aspect of DA. ZPD refers to the difference between individuals' actual ability and their potential for performing a task with assistance of a more capable individual. Higher forms of thinking are developed as a result of interactions between individuals and symbolic and social artifacts. This suggests that individuals do not act directly on the world but their action is mediated. In DA, mediation is provided to bring about changes in performance, while in non-DA no mediation is provided so that the testing instrument can indicate the pure effect of instruction on language learners' performance. That is, in DA, change is in the foreground, while in non-DA, consistency in performance is in the foreground (Poehner & Lantolf, 2003).

There are some differences between traditional testing and DA. Traditional testing does not permit examiners to intervene in the process of testing; however, in DA, examiners are involved in a more active role and intervention to bring about some changes in the examinees' cognitive functioning. Moreover, DA provides teachers with more information about the examinees' learning process in comparison with static or traditional assessments (Haywood and Tzuriel, 2002). Poehner (2007) holds that in DA, assessment and instruction are integrated as a single activity, while in traditional testing, these two are considered as separate activities. Proponents of DA leveling criticism against traditional testing claim that instruction and assessment should not be divorced from each other and should be perceived as a single activity. It should be noted, however, DA is not intended to replace traditional testing but it can be employed as a complement to it as traditional testing focuses on individuals' actual ability and DA predicts individuals' future performance (Antón, 2009).

DA is a process-oriented assessment in which teachers and learners are involved in ongoing interactions (Jeltova et al., 2007) through which learners receive gradual mediations which are tailored to their needs and are contingent (Aljaafreh & Lantolf, 1994). Mediation in DA can disclose individuals' ability and can lead to development. In essence, mediation, which is a key concept in

sociocultural theory, refers to a process in which mental and social activities are regulated by cultur-ally developed concepts, activities, and artifacts (Lantolf & Thorne, 2006).

Leung (2007) maintains that a learner's solo performance does not provide a full picture of his/her future performance, something which mediation illuminates in DA. In fact, traditional assessment exerts emphasis on learners' actual performance and disregards predicting their future perfor-mance. The amount and types of mediation in DA and learners' responsiveness to mediation play a principal role in prediction of learners' future performance (Poehner, 2008).

Vygotosky believes that cognition is subject to modification through mediation which is aimed at improving learners' performance and making them cognizant of their errors while assisting them to reformulate their utterances to reach self-regulation. In essence, mediation helps examiners to per-ceive how examinees respond to mediation so that they can provide instruction tailoring to the learners' needs (Davin, Herazo, & Sagre, 2016).

Transition from interpsychological to intrapsychological reasoning occurs through mediation. In this process the more capable individual assists the less able one to reach self-regulation through dialogic interaction. Basically, in this process the mediator does not help the learner to complete the task but s/he assists him/her how to come up with a solution to the task. Meanwhile, when language learners encounter difficulty in task performance, they may resort to private speech to mediate their self-regulation (Frawley & Lantolf, 1985). Vygotsky (1986) holds that private speech assists children to plan a solution to an existing problem during which thought and language are converged. Private speech is defined as speech addressing self rather than communicating with others to control one's own self while performing a demanding task (Ahmed, 2011). According to Vygotsky, private speech is a self-directed activity emerging as children attempt to reach self-regulation. However, Frawley and Lantolf believe that private speech does not develop in a linear way; that is, no one can reach self-regulation in all contexts.

With the importance of DA in mind, a handful of studies were conducted to explore the impact of DA on English language learners' speaking skills. For instance, Hill and Sabet (2009) investigated the impact of DA on language learners' speaking skills. The results showed that DA can contribute to the development of language learners' speaking skills and cognition. In addition, it was revealed that DA was an optimal way of assessing the development of language learners' speaking skills. However, reciprocity and mediational patterns of the participants are missing from the study, which make the findings inconclusive.

A mediator' interaction with learners in DA is closely interwoven. This interaction is referred to as reciprocity (Poehner & Lantolf, 2005). Mediation and reciprocity are two key factors in DA as they can provide a clear picture of learners' development in a given area (Poehner & Lantolf, 2005)

Son and Kim (2017) also carried out a case study in Korea. The results of the study revealed that the learner's responsiveness pattern gradually changed into higher level, and the mediational moves provided by the mediator became more implicit, which are indicative of the contribution of DA to the language learner's speaking skills. However, their study failed to explore the impact of the enrich-ment programs in a novel and more challenging task. A learner's engagement in tasks with further complexity is referred to as transcendence (Antón, 2009), which exerts emphasis on exposing a learner to disparate contexts rather than identical and homogeneous ones to ascertain if his/her learning has been internalized (Poehner, 2008). This can provide a mediator with further information about the generaliziblity of a learner's performance to more challenging tasks (Feuerstein, Rand, & Rynders, 1988). A study, in which transcendence was also neglected, by Rassaei (2017) showed that oral DA feedback resulted in statistically significant development in learning a target structure by Iranian EFL learners.

Ahmadi Safa, Donyaei, and Malek Mohamadi (2016) also examined the impact of different models of DA on Iranian English language learners' speaking skills. To this end, three groups of advanced English language learners who received interventionist DA, interactionist DA, and non-DA were recruited for the study, the results of which revealed those who received interactionist DA outperformed their counterparts. However, the pure quantitative nature of the study does not allow in-depth understanding of the participants' cognitive process, as DA is intended to capture the cognitive development of learners which is realized through interpretation in a qualitative study.

Given the drawbacks in the literature, the current study attempted to put the spotlight on reciprocity and mediational moves of a beginner and an advanced language learner during DA and transcendence sessions to further illuminate their possible cognitive development in their speaking. Therefore, the following research question guided the current study:

(1) What do mediational moves, reciprocity patterns and private speech reveal about the learners' microgenetic development of their speaking skills?

3. Methodology

3.1. Participants
Two male participants were recruited for the present study. The participants were selected based on a convenience and purposive sampling. One of the participants, Ali (pseudonym), who was doing his MA in Mathematics in a state university in Iran, was 26 years old and originally from Iraq. He stated that he had never taken any private English classes and learned English mainly at school in Iraq where English was offered in elementary school. He rated his speaking as advanced. To confirm his claim, he was interviewed and rated based on IELTS speaking band descriptors by two raters. According to Ali, the four macro-language skills were emphasized in ELT textbooks designed for Iraqi students by Ministry of Education in Iraqi schools. In addition, Iraq local culture was included in the textbooks to familiarize Iraqi students with their own culture and assist them to communicate their culture to the rest of the world. Furthermore, he was eager to learn English and had been exposed to the English language from his childhood as his parents were majoring in the English language. They encouraged and assisted him to learn English during his childhood. He believed that learning English is of paramount importance as it is an international language and the main sources in his major are in English.

The second participant, Reza (pseudonym), was 28 years old and originally from Iran. He was majoring in Herpetology in a state university in Iran and he had never taken any private English classes to enhance his English. He learned English in Iran schools where Grammar Translation Method (GTM) was adopted to teach English and the ELT textbooks were decentralized. He evaluated his speaking as beginning and believed he was in urgent need of developing his speaking skills. He was interviewed and rated based on IELTS speaking band descriptors by two raters. In addition, he asserted that as a PhD candidate, he urgently needed to have a good command of speaking skills as he was supposed to participate in related international conferences.

The mediator was one of the researchers, who has taught English for 14 years at school and university level and was doing a PhD in Applied Linguistics at the time of study. Although he has never been to any English speaking countries, he speaks English fluently. In addition, he has a good command of Arabic and Persian. Interacting with students and having clear learning goals characterize his classes.

3.2. Speaking tasks
Six pictures each of which was composed of a set of scenes were adopted for non-DA and DA sessions. The picture story employed for non-DA and DA pretests and posttests was a "dog rescue" story in which a passerby risks his life to rescue a dog drowning in a river. As this picture story had some emotional scenes, it could be more challenging than those employed in other DA sessions. The

Table 1. An overview of the speaking tasks	
Stages	**Task description**
Non-DA pretest	Dog rescue story in which a passerby risks his life to save a drowning dog.
DA pretest	Dog rescue task, employed in the pretest non-dynamic stage
DA 1	A lion story, composed of a set of pictures indicting a relationship between a lion and a mouse.
DA 2	A picture story in which two cartoon characters go for photographing and sightseeing in a jungle
DA 3	A picture story in which a thief tries to steal from a shop, during which he faces problems.
DA 4	A picture story about a thief trying to steal a woman's purse
DA 5	A picture story about a man saving a woman who is tied to a train rail
DA 6	A picture story about two boys going for camping during which they face a problem
Non-DA posttest	Dog rescue task, employed in the pretest non-DA and DA stages
DA posttest	Dog rescue task, employed in the pretest non-DA and DA stages
Transcendence	A short silent movie named "speechless" in which a couple reaches a critical stage in their conjugal life

study took over two months, during which non-DA and DA pretests were held to diagnose the language learner' speaking skills problem, and DA 1 to 6 were administered based on the interactionist model of DA to develop their cognitive functioning and improve their identified weaknesses in speaking skills, which were identified during the non-DA and DA pretests. In order to ascertain whether the DA sessions had any significant effect on the learners' speaking performance, the participants narrated a story using the first picture story, dog rescue, in the form of non-DA and DA posttests. Furthermore, in order to ensure that their learning was internalized, a novel and more challenging task, in which a short silent movie named speechless, was administered to the participants (hence, the notion of transcendence) and the participants were asked to narrate the story of the movie. An overview of the tasks is presented in Table 1.

3.3. Procedure
Generally, the study comprised four main stages, along with three sets of interviews:

At the outset of the study, the participants were interviewed about their background information such as their language profile, their major, and age. Furthermore, the purpose of the study was explained to them and informed consent was obtained from the participants prior to the study. They were also informed that their participation in the study was not compulsory and withdrawal from the study at any stage was optional.

In the first stage, a task was administered to the participants in the form of non-DA and DA to diagnose their main problems in speaking. In the non-DA, the participants narrated the story without receiving any assistance from the mediator to illuminate their Zone of Actual Development (ZAD), while in DA, the participants were engaged in dialogic interaction with the mediator when performing the tasks. The dialogic interaction provided a comprehensive picture of the participants' ZPD. ZAD, manifested in non-DA, focuses on what learners have already learned, while ZPD, realized in DA, is concerned with learners' potential for development (Vygotsky, 1978).

Following the diagnostic session, they sat an unstructured interview to scrutinize their views on the non-DA and DA sessions. The interviews, each of which took around 10 min, were administered immediately after the non-DA and DA; so that, the participants could express their detailed hands-on experience in non-DA and DA.

In the second stage, six DAs, in which the participants' speaking problems were addressed, were implemented. On average, each DA session took around 20 min. The DA sessions provided the mediator with a comprehensive picture of the underlying problems in their speaking skills.

Table 2. The procedure of the study	
Procedures	**Description**
Unstructured interview	Exploring their background information such as their experience in learning English, major, and age.
Diagnostic non-DA and DA sessions	Diagnosing their speaking problems
Unstructured interview	Exploring their views on non-DA and DA
DA sessions	Assessing and assisting for six sessions
Diagnostic non-DA and DA sessions	Examining their progress in speaking performance
Unstructured interview	Exploring their views on the whole non-DA and DA
Transcendence session	Assisting their performance in a novel and more challenging task

In the third stage, the task adopted in the first stage was used in the form of non-DA and DA post-tests to ascertain whether the DA sessions had had any significant impact on their speaking performance. Immediately after the last session, the participants took part in an unstructured interview to explore their vantage point on the whole DA and non-DA sessions.

In the final stage which was held 10 days after the last DA, transcendence was implemented to examine whether the participants internalized their learning. In this stage, the task was novel and more challenging as it was a silent movie, which did not provide learners with any lexical hints and contained complicated scenes. The whole procedure of the study is summarized in Table 2.

3.4. Data analysis

All the interactions between the mediators and the learners were audio recorded and subsequently transcribed *verbatim*. To make the data more manageable for further analysis, we extracted and focused on episodes in which the learners talked about language or other and self-regulation occurred, something which is referred to as Language-Related Episode (LRE). Swain (2001) defines LRE as "any part of a dialogue where students talk about the language they are producing, question their language use, or other- or self-correct their language production" (p. 287).

Thematic analysis was adopted to extract the theme from the recorded interviews. That is, the themes were emerged from the data of the study instead of imposing predetermined themes on the data, hence the inductive approach was adopted (Charmaz, 2006).

To scrutinize the language learners' developmental change, the microgenetic method, in which the interaction between the learner and the mediator during task performance is highlighted, was adopted. Microgenetic analysis provided the researchers with comprehensive information about the language learners' development as in the microgenetic analysis the focus is on the process of change in learners' learning. Lantolf (2000) maintains that microgenetic analysis is an optimal method for tracing changes in behavior, which is an indicative of cognitive development. Belz and Kinginger (2003) also state that the microgenetic method allows a mediator to obtain a comprehensive picture of learners' cognitive development.

In the microgenetic analysis, the researchers focused on three aspects of the interaction between the mediator and learners: (1) mediational moves (2) learners' reciprocity (3) developmental movement from object regulation to self-regulation. In the present study, the mediator examined closely the moment-by-moment changes in the learners' performance on the target structures. More specifically, their higher level of reciprocity and fewer numbers of mediational moves provided by the mediator represented their development in the area under investigation. Moreover, the type of their private speech was also explored to ascertain their possible movement toward self-regulation, which is the ultimate goal of DA.

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Regarding the mediational moves, the researchers adapted the Regulatory Scale developed by Aljaafreh and Lantolf (1994). The mediational moves were not prescriptive as they were provided for the learners based on their ZPD. That is, they were presented from the most explicit to the most implicit, which start from 0 (mediator asks the learner to find the error and correct it independently) to 12 (mediator provides the learner with examples). The learners' responses to the mediation, which provided a clear picture of changes in language learners' behavior (Ebadi, 2016), were taken into account during dialogic interaction between the mediator and learners.

It should be noted that the inductive approach was taken to come up with the typology of the learners' responsiveness to mediation, adapted from the typology proposed by Lidz (1991). Learners' responsiveness indicates their level of independence for their learning, which starts from 1 (unresponsiveness) to 9 (rejects mediator assistance).

In the final stage, the learners' developmental process was explored with respect to their movement from object regulation to self-regulation. According to Aljaafreh and Lantolf (1994) learners move from intermental to intramental functioning, during which learners gradually take more responsibility for their learning and rely more on themselves through assistance.

4. Results and discussion

4.1. Classification and frequency of learners' errors
The frequency and types of the language learners' errors were extracted from their narration in non-DA and DA pretests. As can be seen from Table 3, incorrect use of past tense was the most frequent error in the beginner's narration, and incorrect use of prepositions was the most frequent error by his advanced counterpart. Although during DA sessions, all the problems identified in the pretests were addressed, the focus of the present study is merely on the most frequent errors (i.e. past tense and prepositions) made by the participants.

4.2. Past tense employed in the beginner's narration
Table 4 demonstrates the correct and incorrect uses of past tense in the beginner's narration. Given the non-DA/DA pretests and posttests and transcendence, progress in the use of correct forms of past tense in the participant's narration can be observed. That is, the number of correct uses

Table 3. Learners' errors classification				
Proficiency level	**Learner errors**	**Examples**	**Frequency of errors**	
			Non-DA pretest	**DA pretest**
Beginner	Wrong word choice	She want to *survive* her dog	9	4
	Omission of verb be	A dog *swimming* in the river	6	2
	Past tense	*Look, want, come*	13	9
	Article	*Old woman* see her dog	1	2
	Preposition	Fall *the water*	0	1
Advanced learner	Past tense	Take	2	1
	Preposition	It's a picture *about* a river	6	5
	Word order	*To reach with his hand the dog*	2	0
	Wrong word choice	There's some *homes*, he *climbed down* from the bridge	2	2
	Omission of verb to be	*The case seen*	1	0

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Table 4. Overview of the incorrect and correct use of past tense in the beginner's narration						
		Non-DA pretest	**DA pretest**	**Non-DA posttest**	**DA posttest**	**Transcendence**
Correct use	Narration time	5:28	14:31	5:53	11:51	24:38	
			Went	Came	Took	Took	
				Went	Covered	Had	
				Got	Was	Saw	
				Was	Gave	Didn't	
				Had	Wanted	Went	
				Covered	Came	Met	
					Went	Understood	
						Happened	
	Total	0	1	6	7	8	
Incorrect use		See	Is (twice)	Felt in the Water	Felt in the Water	Wants	
		Want (twice)	Fall (twice)		Swimmed	Spend	
		Come	See			Sits	
		Take (5 times)	Want			Have	
		Look	Take			Look	
		Is (3 times)	Say			Pick up	
		Doing	Looking				
	Total	13	9	1	2	6	
Correct use	Narration time	DA1	DA2	DA3	DA4	DA5	DA6
		Was	Told	Was	Did	Tied	Came back
		Spoke	Saw	Went	Reported	Had	Made
		Saw	Slept	Told	Understood	Talked	Helped
		Had	Had		Came	Came	Went
					Gave	Saw	Gave
							Worked
							Started
							Was
							Thought
	Total	4	4	3	5	5	9
Incorrect use		Wake up	Are	Given	Is	Understand	Tolk
		Want	Come	Shooted	Hug	Have	
		Catch	Start	Fall	Want	Speak	
			Woking up	Speaked		Save	
			Find				
			Going				
			Look				
	Total	3	7	4	3	4	1

increased while the incorrect ones decreased to a great extent. The following language-related epi-
sodes indicate the incorrect and correct use of past tense in the non-DA pretest and posttest.

(Non-DA pretest):   *this man **come** to help this woman*.*

(Non-DA posttest):   *A man **came** to help the woman.*

Furthermore, having closely examined the errors, we identified that the learning process did not fol-
low a linear pattern. This is best illustrated in DA 4 as the learner used the correct form of past tense
of *understand* but regressed to previous stages in DA5.

DA 4:   he understood it

DA 5:   *they **understand** that they are friends*.*

Overgeneralization was also observed in the learner's errors as the learner attempted to change ir-
regular verbs into past tense by adding "ed" to the verbs. For instance, in DA3, he added "ed" to
shoot to change it into past tense.

DA3:   *the bald was **shooted** to the thief*.*

4.3. Meditational moves provided for the beginner and his responsiveness

Table 5 demonstrates the meditational moves provided by the mediators based on the language
learner's ZPD. In addition, the learner's responsiveness to the mediation was summarized in Table 6.
As can be seen from Table 5, in DA pretest, the learner received 19 meditational moves, while in DA
posttest, these decreased by half, which means the language learner required less help to carry out
the task. In the transcendence session in which the learner was asked to conduct a novel and more
challenging task, he was provided with 16 meditational moves which were fewer than what he re-
ceived in DA pretest; however, they were more than those in DA posttest. This can be justified by the
premise that the learner was able to internalize the target structure although he encountered some
problems in performing a new and more challenging task. Another significant trend in his learning
process was the level of explicitness of the meditational moves, which in comparison to pretest DA,
for example, the meditational move of *providing clues to the learner* was decreased by half in posttest
and repeating the correct part which is more implicit was also provided in posttest. Regarding tran-
scendence, the same trend can be observed with the exception of the meditational move of *providing
explanation,* which increased in posttest and transcendence. This may indicate that the difficulty of
the task entails more explanation to assist the language learner. Table 6 revealed that the learner's
responsiveness to the mediations gradually reached a higher level. For instance, his unresponsiveness
in the pretest was replaced with a higher level of responsiveness such as *offering explanations and
using the mediator as a resource* in posttest and transcendence. All these sources of evidence imply
that the language learner made a significant progress in using the target structure in his speaking.

Table 5. Mediational moves of pretest, posttest, and transcendence for the beginner			
Mediation type	**Frequency**	**Frequency**	**Frequency**
	DA pretest	**DA posttest**	**Transcendence**
Repeating the whole part containing the error	6	3	6
Repeating the correct part and stopping at the error waiting for the learner to correct the error		1	1
Repeating only the error	3		3
Asking direct questions about the erroneous part	3		1
Providing clues to the learner	6	3	2
Providing choice		1	
Providing explanations	1	2	3
Total	19	10	16

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Table 6. Responsiveness to mediation by the beginner			
Responsiveness type	DA pretest	DA posttest	Transcendence
Unresponsiveness	1		
Repeating mediator			1
Responding incorrectly	9	4	5
Incorporating feedback	3	2	
Overcoming problems	6	6	9
Offering explanations		1	1
Using mediator as a resource		2	1
Total	19	15	17

The following language episodes illustrate some of the mediations and the language learner's responsiveness to the mediations provided by the mediator during pretest, posttest and transcendence.

Pretest DA (dog rescue story):

Learner:	Old women on the bridge **looking** her dog
Mediator:	The women looking?
Learner:	The woman is looking.
Mediator:	Are you sure that is looking is correct.
Learner:	Woman/she is looking
Mediator:	You need to use another tense
Learner:	Aha past
Mediator:	How do you say it?
Learner:	The woman was look at
Mediator:	No we don't use was here. You need to use the past tense of look
Learner:	Aha the woman looked at her dog

Posttest DA (dog rescue story):

Learner:	The woman want to help.
Mediator:	Want to help?
Learner:	Wanted to help her dog
Mediator:	Ok

Transcendence (silent movie named "Speechless"):

Learner:	The man saw that the girl write her number*.
Mediator:	Write her number?
Learner:	Written
Mediator:	The past form of write is not written
Learner:	Aha wrote her number
Mediator:	Okay

The frequency of each type of the private speech, adapted from Ebadi (2014), was summarized in Table 7 to scrutinize the effect of mediation on the possible changes occurring in the beginner's private speech, which aimed at moving from object regulation to self-regulation. According to

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Table 7. An overview of the types of private speech, emerged from the stories narrated by the beginner					
Private speech type	Non-DA pretest	DA pretest	Non-DA posttest	DA posttest	Transcendence
Shift from L2 to L1	4	3	1	2	4
Repetition			2		
Incomplete sentences			1		
Perspectival markers			1		
Additional information				1	1
Other regulation			1	3	4
Self-regulation		1	1	2	5

Ahmed (2011), a learner uses private speech to decline the cognitive demands required for performing a task. In fact, he/she attempts to regulate his/her own self. That is, whenever an individual encounters a difficult task, he/she vocalizes his/her inner speech in order to control the task. Tomlinson (2011) also believes that inner voice used by language learners is a principal element in language learning process as it can decrease anxiety and increase self-confidence and can also help them to gain control of their own self and assist them to reach self-regulation (McCafferty, 1992).

As can be seen from Table 7, the beginner reached the pinnacle of his self-regulation in transcendence, which can be considered as evidence of progress toward more reliance on self. No self-regulation was observed in the pretest while this happened twice in the posttest DA and five times in the transcendence. This indicates that DA assisted the learner to move toward more reliance on his own resources and develop more autonomous learning.

What follows are some examples of the private speech used by the beginner:

4.3.1. Shift from L2 to L1
Switching from L1 to L2 was used as the most frequent private speech. This shift can be attributed to the beginner's lack of language proficiency, something which was not spotted in his advanced counterpart's private speech. He mainly used L1 to ask for help specifically when he did not know how to refer to things in English.

The women gave her a bag to (Dozd chi mishod?) (He asked about the word thief)
And then they (baghal kard.an chi mishe?) (He asked about the word hug)

4.3.2. Repetition
In studies by Ebadi (2014) and Ohta (2001), repetition was among the most frequently used private speech, something which was not observed to be used frequently by the beginner. This is best demonstrated in the following episode:

*He got dog and **swimming** straight **swimming to out he was swimming to out**.*

4.3.3. Incomplete sentences
One form of private speech was the use of incomplete sentences which can be attributed to failure in thinking process (Centeno-Cortés & Jiménez Jiménez, 2004). Unfinished sentences show lack of language proficiency of language learners.

And then he went to the water he gave … he went to the water and he get/got their dog

4.3.4. Perspepectival markers

This type of private speech, best illustrated in the following episode, relates to the narration of the story from the narrator's temporal perspective without referring to the time of events inside the story (McCafferty, 1994)

In this picture I see a dog felt in the water

4.3.5. Additional information

In this type of private speech, the beginner added some information which cannot be found in the picture stories and can be due to his linguistic deficiency. This is best illustrated in the following example:

She was crying because she was very happy.

4.3.6. Other regulation

The beginning language learner sometimes referred to the mediator for help. This kind of private speech is referred to as other regulation. The following example from the data demonstrates this type of private speech:

What is the past tense of throw?

4.3.7. Self-regulation

This type of private speech refers to self-recognition and correction of an error which is an indicative of self-regulation. Self-regulation was most frequently observed in transcendence, which is in harmony with Ebadi's study (2014). As Frawley and Lantolf (1985) maintains, self-regulation does not take place in a linear fashion and is completely task- and context-specific. The following examples illustrate his self-regulation.

The first time they see/they saw each other.
He don't/didn't look at the girl.
They first meet/ they first met.

4.4. Prepositions employed in the advanced learner's narration

Regarding non-DA/ DA pretests and posttests and transcendence, a slight progress has been observed in advanced learners' narration. In the non-DA pretest, his correct use of prepositions equals the incorrect ones; however, in the DA pretest and non-DA and DA posttests, the incorrect use was decreased. As can be seen from Table 8, although he employed more correct prepositions (F = 10) in transcendence, his incorrect use of prepositions reached 7, which can be justified by the novel and more challenging task which acted as a stumbling block to his further successful task performance. This part of the study is in line with those by Ebadi's (2014) and Kozulin's (2011), which indicated backsliding in the participants' task performance in transcendence. According to Ebadi (2014), a learner may represent a higher level of responsiveness with fewer mediational moves in DA sessions while in transcendence the same learner requires further mediational moves with low level of responsiveness on the part of the learner. On closer inspection, it can be implied that some errors remained throughout the DA sessions. For example, the incorrect use of *entered in* * which can be observed in DA6 and non-DA and DA posttests. This also shows that the learner not only used incorrect prepositions in his narration but also added redundant prepositions to the verbs, hence the concept of overgeneralization. The following episodes, summarized in Table 8, represent the correct and incorrect use of prepositions in the advanced language learner's narration:

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Table 8. Overview of the incorrect and correct use of prepositions in the advanced learner's narration

		Non-DA pretest	DA pretest	Non-DA posttest	DA posttest	Transcendence
Correct use	Narration time	6:46	12:18	5:46:	12:00	24:00
		There's some homes behind it,	On the bridge,	On the bridge,	At the beginning,	A vase of flowers,
		By the bridge,	Fell from the bridge,	In the river,	In the river,	Threw a vase of flowers from the window,
		Gathered around the bridge,	He went inside the river,	In his hand,	On the bridge,	An Argument with,
		Shout out for help,	He went back toward the bridge,	Fell in the river,	Going into the river,	On the table,
		Help the man to stand on the bridge,	Put a towel on him	Swam toward the dog,	Save him from the river,	Was taken by him,
		Put a towel on the dog		Put a towel on him	Put towel on him,	Thinking about,
					Took a picture with the dog	Shout at each other,
						Closer to her,
						Walked toward her,
						On the chair
	Total	6	5	6	7	10
Incorrect use		It's a picture about,	On the river,	Entered in,	Spotted at,	Came in to the room,
		A bridge on it,	Swim forward the dog,	Reach to the dog,	Entered in,	Grabbed the picture from the table,
		At the morning,	Climb upon the bridge	Helped him Came at the bridge,	Reach to the dog,	From the first sight,
		The place of the case was seen,			Come up at the bridge	Took a picture for her,
		Jump on the river,				Thinking within himself,
		Swimming from the river				Threw the paper plane into him,
						Spoke to each other
	Total	6	3	3	4	7

		DA1	DA2	DA3	DA4	DA5	DA6
Correct use	Narration time	12:00	15:20	14:32	15:17	4:49	5:32
		Under a tree,	Prepare for Taking the Picture,	Went to,	On the Street,	A rope around her,	At the beginning,
		In the past,	At the end	Point at,	In his hand,	Neck and hands, Tied up	In the river,
		In his hand,		Cooperating with,	Speak about the old days,	From her hand,	On the bridge,
		In the sky		Stop from,	Speak with,	Become free from her ties	Going into the River,
				Between them,	Belong to,	Have lunch with	Save him from The river,
				Struck the criminal man by mistake,	Tell them about		Put towel On him,
				Fell on the ground			Took a picture with the dog
	Total	4	2	7	6	4	7
Incorrect use		At the night,	On the middle of the road,	Into his hand	Close by,	Approach in,	Spotted at,
		On the forest,	Problem in the car,		Pointed on the woman's body	Tied her at	Entered in it,
		Help the lion by tearing up the net	Camp on the place,				Reach to the dog,
							Come up at the bridge
	Total	3	3	1	2	2	4

*The dog was swimming **on** the river*.*
*She was getting closer **by** the wall*.*
*There was a woman who was walking **on t**he street.*
*The same guy who was cooperating **with** the criminal*

4.5. Mediational moves provided for the advanced learner

Table 9 demonstrates the mediational moves provided for the advanced language learner in accordance with his ZPD. Regarding DA pretest and posttest, a decrease in the mediational moves in the DA posttest, indicating progress in the learner's learning process, can be observed. However, in the transcendence, an increase in the mediational moves was spotted, which suggests that the difficulty and novelty of the task might enforce the learner to solicit further assistance from the mediator. In comparison to DA pretest, in DA posttest, the learner was provided with less explicit mediation such as *asking direct question about the erroneous part, providing choice, and providing correct answer*, which can be regarded as progress in the learner's learning process.

Table 10 demonstrates the learner's responsiveness to the mediational moves, which indicates the learner's higher level responsiveness in DA posttest compared with that in pretest DA. For example, his *unresponsiveness* in DA pretest, which is the lowest level of responsiveness, disappeared in DA posttest. In transcendence, although 6 times he responded incorrectly, he overcame problems 9 times. One of the main differences between the beginner and advanced language learners in terms of responsiveness was the number of conjectures which the advanced learner provided during mediation. This issue can be attributed to his broader linguistic repertoire, which allowed him to try further responses.

Table 9. Mediational moves of pretest, posttest, and transcendence for advanced learner			
Mediation type	**Frequency**	**Frequency**	**Frequency**
	DA pretest	**DA posttest**	**Transcendene**
Asking for clarification			1
Repeating the whole part containing the error	7	7	6
Providing the correct part and stopping at the error waiting for the learner to correct himself			4
Repeating only the error	2	2	4
Asking direct questions about the erroneous part	4	1	2
Providing clues to the learners		1	1
Providing choice	1		
Providing explanations			2
Providing correct answers	1		
Total	15	11	20

Table 10. Responsiveness to mediation by advanced language learner			
Responsiveness type	**DA pretest**	**DA posttest**	**Transcendence**
Unresponsiveness	2		
Repeating mediator	1	1	3
Responding incorrectly	3	3	6
Incorporating feedback	2		
Overcoming problems	6	4	9
Using mediator as a resource	2		1
Rephrasing	1	1	2
Total	17	9	21

The following episodes demonstrate how mediation and responsiveness to mediation were conducted in DA pretests and posttests and transcendence:

Pretest DA (dog rescue story):

Learner:	While the dog was swimming on the river
Mediator:	The dog was swimming on the river?
Learner:	He was swimming or he fell from the bridge something like that
Mediator:	No you said the dog was swimming **ON** the river.
Learner:	Was swimming on the river yeah
Mediator:	On the river?
Learner:	I guess so
Mediator:	Is it correct on the river?
Learner:	No … no he was swimming in the river. Was that the correct one IN?
Mediator:	yeah

Posttest DA (dog rescue story):

Learner:	He after he entered in the river
Mediator:	He entered in?
Learner:	He entered the river

Transcendence (short silent movie named "Speechless"):

Learner:	He came in to the room
Mediator:	He came … what did you say?
Learner:	He came in to the room.
Mediator:	Do you think we can use two prepositions here?
Learner:	No he came in the room
Mediator:	ok

Table 11 demonstrates the private speech used by the advanced language learner. *Shift from L2 to L1* and *incomplete sentences* used by the beginner were not observed in the advanced language learner's narration. As already stated, this might be due to the more enriched linguistic repertoire of the advanced learner, which enabled him to eschew such deficiency presented in the form of private

Table 11. An overview of the types of private speech, emerged from the stories narrated by the advanced language learner					
Private speech type	Non-DA pretest	DA pretest	Non-DA posttest	DA posttest	Transcendence
Repetition			3	1	1
Perspectival markers		1			
Additional information	3		1	5	3
Self-comment	3	2			
Other regulation		4			1
Self-regulation	1		1	2	3
Total	7	7	4	8	8

speech. Furthermore, the advanced learner was at his zenith in transcendence, which can be regarded as an indicative of progress toward self-reliance in learning. *Self-comment* is a private speech spotted in the advanced learner's narration, something which was not employed by the beginner. In this type of private speech, a learner provides comments on a particular event in the story as an object regulation to have a better understanding of the story. Here are some examples extracted from the advanced learner's narration representing the use of this type of private speech:

> *Maybe he climbed up or the woman helped him to climb up on the bridge.*
> *I don't know something was floating in the river*
> *He was swimming or he fell from the bridge something like this*

5. Final remarks

The findings of the present study, which are in line with those by Ebadi (2016), Hill and Sabet (2009), Son and Kim (2017), revealed that DA over time had a significant positive impact on the participants' learning process. The frequency of errors, mediations provided by the mediator, the participants' responsiveness to the mediation and the types of their private speech were regarded as an index for assessing their progress in speaking skills. The evidence from the aforementioned sources revealed that DA helped the participants to reach self-regulation to a great extent. This was manifested in the forms of fewer mistakes and mediational moves, a higher level of responsiveness to the mediations, and movement toward self-regulation in posttest DA. Although in transcendence sessions, the participants encountered a few problems, they demonstrated a good deal of reliance on their own self in the process of learning. The data further suggest that the beginner benefited more from DA, something which can be observed in the correct and incorrect use of the target structure and mediational moves provided for both participants. This can be attributed to the nature of English prepositions, which seems to be more complicated than English past tense as there is no single fixed rule for the use of English prepositions, which can make it intricate even for native speakers of English much less for non-native English speakers (Catalán, 1996; Khampang, 1974).

Thematic analysis of the interviews further revealed that the participants were satisfied with DA and found it helpful:

Advanced learner: *it [DA] was helpful like in a huge way because you know for the first time I get corrected with someone that has the specialty.*

They also believed that DA raised their self-confidence and encouraged them to perform the tasks and considered it more supportive as they were not left to their devices.

Beginner: *DA increased my self-confidence because you were there to help me perform the tasks.*

This can suggest that English language teachers and material developers need to take students' language needs into account and avoid one-size-fits-all approach to language teaching and learning. This is best illustrated by the fact that although the learners with different proficiencies performed the same tasks, each was in need of specific assistance which catered to his needs. This characteristic of DA highlighting learners' needs makes DA a more fair and ethical approach to assessment (Shabani, 2016).

This study like any other qualitative studies is not concerned with the generalizability of the findings. That is, in the present study, attempts were made to have further insight in speaking DA across proficiency level; so that, the findings can pave the way for further research on DA speaking skills across different language proficiencies to further illuminate the diversity of language learners' needs. Krashen (2014) argues that even though in case studies, researchers do not intend to generalize their findings to other cases, case studies can be regarded as a valid scientific research study.

A set of case studies in various contexts can provide a more comprehensive picture of a given area under investigation. Krashen further holds that similar case studies should be taken into account as a group rather than separate studies so that one can test his/her hypotheses about the learning process. Similar case studies can, therefore, assist researchers and teachers alike to have a clear insight into the learning process, something which might not be presented vividly in a quantitative study on a larger group.

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