

**The effect of dynamic assessment on Iranian L2 writing  
performance**

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## **Abstract**

Dynamic assessment research, with its roots in Vygotsky's Zone of Proximal Development, is still in its infancy (Lantolf and Poehner, 2004; Poehner, 2008). It came to the attention of scholars to break away from a static, incomplete and unfair form of assessment to the dynamic form of assessment in order to more comprehensively uncover learners' independent and assisted level of performance. In order to further investigate effectiveness of dynamic assessment, this study applies the regulatory scale offered by Aljaafreh and Lantolf (1994) to Iranian EFL learners' writing ability. The learners responded differently to the same type of errors they made in the pretest stage after introduction of mediation by the teacher. The regulatory scale which was applied in the intervention stage uncovered the fact that the individual learners had different developmental levels. The result of the study shows that a DA approach to EFL learners' writing ability can prove useful.

## **Introduction**

The history of second or foreign language programs has been characterized by a long tradition of standardized testing as the most reliable procedure to uncover learners' language abilities. Began by Vygotsky (1978), this form of learners' language ability was called into question due to its underestimation of learners' abilities by calling attention to the developmental differences among the learners and, therefore, more accurately accounting for their abilities. This was along with the recognition that interaction is an important and powerful tool of language assessment (Swain, 2001). Dynamic assessment was, therefore, born to offer a monistic approach to both assessment and instruction which is rooted in Vygotsky's socio-cultural theory of mind and particularly in his concept of the Zone of Proximal Development.

## **Literature Review**

The development of writing proficiency is an inseparable part of foreign language teaching and learning. The importance lies in the fact that EFL learners of English often tend to lack sufficient linguistic means to convey their thoughts in written English. Among various approaches to explaining L2 acquisition, there is a specific approach that relies on how L2 knowledge is internalized through experiences which are of sociocultural nature. This approach known as sociocultural theory (SCT) is “a theory of mind” (Lantolf, 2004, p. 30). SCT is based on the idea that “cognition originates in social interaction and is shaped by cultural and sociopolitical processes” (Watson-Gegeo, 2004, p. 332). As a result, the SCT is concerned with cognition, meaning and communication more than formalist approaches to language learning (Lantolf and Thorne, 2006). The balance of research studies in SLA has advocated the microgenetic which is characterized by (a) observation of individuals through a period of change, (b) conduction of observations before, during and after the period of change, (c) regular conduction of observations during the period of transition and (d) intensive analysis of behavior, both qualitatively and quantitatively in an attempt to identify the processes that emerge in the developmental change (Ellis, 2008). Mediated learning by means of social interaction or private speech, zone of proximal development, internalization by means of which one moves from object or other regulation to self-regulation and activity theory constitute the key concepts in SCT. Among the key concepts alluded to above, mediated mind is the most fundamental concept (Lantolf, 2000). According to this concept, humans rely on certain tools and signs rather than directly act on the physical world. This enables us to change the physical world. Mediation and regulation of our relationships with others and us as well as changing these relations is only possible by use of symbolic tools or signs. These signs, based on which humans build indirect or mediated relationships between themselves and the world include among other things the language (Lantolf, 2000). Mediation refers to the part played by other significant people in learners’ lives who help improve their learning by selecting and shaping the learning experiences which learners are exposed to. Basically, according to the mediation concept, effective learning takes place in the social interactions between two or more people with different levels of skill and knowledge. It has also been

considered both as a means of social interaction and private speech. Verbal interaction is essentially dialogic in nature in which a more capable interlocutor such as an expert creates a context in which the less capable interlocutor, i.e. the learner, partakes actively in their learning. In this type of interaction, called scaffolding, the expert fine-tunes the support given to the learner during the learning period. Another concept of SCT, closely related to mediation, is the zone of proximal development (ZPD). ZPD is defined as “ the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86). Put another way, it refers to a layer of skill or knowledge which is just above the level at which the learner is currently capable of independent performance. The ZPD, with its emphasis on the readiness to learn, is based on the premise that the best way for the learner to move into the next level is through social interaction or working together with another interlocutor, usually an adult person or a more competent peer (Cole, 1985; Rogoff and Wertsche, 1984). It has been embraced by psychological researchers as it has important implications for teachers concerning what they can do to aid learners in their learning by setting tasks which are at a level just beyond that of learners’ current level of functioning and teaching them how to take further steps up to the coming unassisted levels.

Dynamic assessment (DA) is yet another term in social constructionism, first introduced by Feuerstein and defined as a way of assessing the true potential of learners in a way that differs significantly from that of traditional tests (Williams and Burden, 2002). Dynamic assessment has its roots in Vygotsky’s sociocultural theory of mind (Poehner, 2008). The significance of the notion of DA lies in the fact that it extends the interactive nature of learning as promoted by mediation theory and ZPD to the process of assessment. DA renders the conventional approach to assessing learners’ knowledge and abilities in which one person such as the teacher one-sidedly assesses the learner as inadequate and views assessment as a two-way process involving interaction between both parties. The assessor, therefore, enters into a dialog with the assessed in an attempt to learn of their current level of performance and share with them the possible ways in which that level of performance might be improved a step further (Williams and Burden, 2002). More importantly, DA sees learning and assessing as one construct and,

therefore, rejects non-dynamic approaches to teaching and testing where learning and assessment are bifurcated.

Poehner (2008) argues that the lack of a learning phase during the assessment whose outcome is an underestimation of learners' underlying abilities constitutes a major hurdle in the current assessment processes. Contrary to the norm in the traditional testing which emphasized independent functioning of the learners, DA offers a more comprehensive and humanistic approach in which learners are assessed based on their assessed and unassessed performance (Lantolf, 2006; Anton, 2009). Therefore, observation of solo performance will prove inadequate if one is to understand the development processes, introduce the necessary interventions in order to help learners overcome difficulties and aid them in their ZPD (Caffrey, Fuchs and Fuchs, 2008, Poehner, 2008). Instead, simultaneous active collaboration with individuals will reveal the full range of learner abilities. As mentioned earlier, the key to a monistic view of instruction and assessment is resort to mediation, defined as the appropriate form of support (Poehner, 2008). This way, the teacher is able to both understand and promote the learners' abilities. Sternberg and Gregorenko (2002) point out that DA is a paradigm shift toward a new philosophy of assessment where the assessment is meant to help individual learners develop through intervention.

Various models of DA have been offered in the literature with the most known ones being interactionist AD, interventionist DA, the Sandwich format and the Cake format. Interactionist and interventionist approaches to DA were introduced by Lantolf and Poehner (2004) with each approach subscribing to a different kind of mediation. Interactionist DA subscribes to Vygotsky's idea of cooperative dialoging. This approach is highly sensitive to ZPD as the assistance emerges from the mediator and the learner. This approach focuses on the individual learner or learners with no predetermined endpoints (Poehner, 2008). The interactionist approach has been called *teaching in assessment* (Allal and Ducrey, 2000). The interventionist approach, on the other hand, remains somehow loyal to certain characteristics of the traditional non-dynamic procedures and uses the standardized procedures and forms of assistance in order to come up with quantifiable results to make the comparisons between and within the groups possible. In interventionist DA an endpoint is predetermined. Interventionist DA has been called *assessment in teaching* (Allal and Ducrey, 2000).

Sternberg and Gregorenko (2002) distinguish between the Sandwich format and the Cake format of DA. The Sandwich format is more in line with traditional non-dynamic forms of assessment. In this approach, the learners are administered a test after which they receive intervention for some sessions and finally they receive a post-test with a parallel form to observe the effectiveness of the treatment. Intervention in the Cake format, however, is conducted by giving assistance to learners, based on some predetermined criteria, on the assessment session itself.

Despite the fact that there is a robust body of literature on DA in psychology and general education little has been conducted concerning L2 performance from DA perspective (Poehner, 2008). Ableeva (2008) investigated the effects of dynamic assessment on L2 listening comprehension. He used a DA intervention with learners of L2 French at a large US university in 2005. Six undergraduate students, one male and five females, within the age range of 18-20, participated in the study. Five participants were English native speakers and one of them came from a Spanish-English background. The intervention lasted 6 sessions within a one-week period. There were three stages to the study, namely, a pretest, DA intervention and a retest. In the first stage, they listened to radio recordings twice and answered questions. During the retest, the participants were required to write summaries to verify comprehension. The results showed that a DA approach can facilitate comprehension of authentic aural language and that it enables teachers to more accurately evaluate the learners' listening abilities. One of the studies that figures prominently in research on L2 DA, is the one conducted by Aljaafreh and Lantolf (1994). They studied the effect of negative feedback and scaffolding on adult ESL learners' development of English tense, articles, prepositions and modal verbs. During the assessment procedure, they worked out appropriate mediation to continuously assess the learners' needs and abilities and giving appropriate scaffolding. Upon students' failure to either accomplish the task or make errors, gradual scaffolding was offered based on a regulatory scale composed of 13 types of feedback starting from the most implicit to most explicit. This scale helped them provide a kind of feedback finely tuned to the individual learners' developmental needs. They finally provided the learners with the correct form and gave examples as the last type of feedback in their scale. Table 1 illustrates their regulatory scale.

### Regulatory Scale- Implicit to Explicit

0. The 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 use an auxiliary here”).
8. Tutor rejects learner’s unsuccessful attempts at correcting the 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 the other forms of help fail to produce an appropriate responsive action.

Table 1: Regulatory scale- implicit to explicit (Aljaafreh and Lantolf, 1994: 471)

This study is an attempt to apply this regulatory scale to dynamically assess EFL learners writing ability and offer help to individual learners, ranging based on the scale from most implicit to most explicit, in order to see whether and to what extent it can improve their writing ability. To this end the following to research questions were asked:

1. Does dynamic assessment have any significant effect on the betterment of Iranian EFL learners?
2. What aspect of writing is more influenced by the effects of dynamic assessment: spelling, grammar or vocabulary choice?

## **Methodology**

### Study Design

From among the various approaches to DA, touched upon in the literature review, the regulatory scale was found most convenient for this study as the purpose of the study was to find out about the effects of giving individual feedback and scaffolding on identifying the individual's ZPD and enhancing it. In addition, Aljaafreh and Lantolf's (1994) study was concerned with grammatical items such as tenses and articles which is, in fact, the primary focus of this study as well. Following this model, different stages of scaffolding were introduced to individual learners except the last two stages where explicit explanations were provide to the whole class of learners.

### Participants

The participants were a class of 15 pre-intermediate EFL learners, all males and ranging in age from 14-17, learning English at Iran Language Institute, Tehran, Iran.

### Procedure

The treatment lasted for eight sessions during a period of four weeks and it was conducted on an individual basis. The treatment lasted for ten to twenty minutes each session. The procedure included the following stages: 1) the pretest; 2) the DA intervention; and 3) the retest.

For pretest, the learners were asked to write a one-page composition on comparing Iranian and American movies. Writing a composition was considered as acceptable for the pretest as, by doing this, their ZAD (zone of actual development) or their independent performance could be identified. The second staged was characterized by DA intervention where the thirteen steps of scaffolding was conducted. For the retest, the individuals were again asked to write a one-page composition in order to see any differences in the number and type of mistakes between the two compositions.

## **Data Analysis**

The pretest

After collecting the learners' first compositions and analyzing them, it was noticed that their writings suffered from different spelling, lexical and grammatical inadequacies together with problems with cohesion and coherence.

Spelling mistakes:

*to compose the btter movies, when the American movie start's, and because people like movies, but Irainian some times make their movie.*

Lexical mistakes:

*..in Iranian film man and woman marry together, ..in America there are many rich protector but in Iran there are few rich protector, because some of them give people information and something else ....., There are some differences between them such as, the subject of the movie, actors and actresses and many things, when you see Iranian film you want see until end of it. American film has many exating [exciting] set, because Iranian films learn us many things,*

Grammatical mistakes

*they can play with their children, watch film, and talking with their wife, Iranian film is beter than American film, some of the film in American's have a lot of action, Those pictures moved at front of the lamp, they have a few free time to do something that they like, so free time is very important for them, American's movie has better subject than Iranian's movie, because these movies make them admiration, Cinema is best place to watch the movies*

## Cohesion and coherence

*I don't like movies because when I see movies I can't do another thing, American film has many exating set, but in Iranian film,*

### The DA intervention

During the intervention stage, the following steps were taken:

After collecting the pretest compositions and analyzing them, they were given back to the learners and the learners were asked to look for any possible mistakes in their writings. Some of the learners tried to raise questions in order to get some hints from the teacher but they were rejected. After collecting the paper, it was noticed that a couple of learners had corrected the spelling and grammatical mistakes only. The learners were told that session that they were going to find as many mistakes as possible in their writings with necessary hints from the teacher. Examples include:

*They make many kind movies > They make many kinds of movies*

*They can be similar to peaple's life > They can be similar to people's life.*

Then, first the sentences containing mistakes, and then the phrase or phrases containing mistakes were underlined by the teacher without identifying either the nature or the exact location of the errors. The learners were asked to find and correct as many mistakes as possible alone. They were allowed to check with the teacher. The teacher rejected unsuccessful attempt at recognizing the errors.

*Learner: Sorry, all of the sentence is wrong?*

*Teacher: No, some of the words may be wrong. Try to find those wrong words.*

*or*

*Learner: teacher, how many mistakes are there?*

*Teacher: I don't know, you should try to find.*

After that, the teacher indicated the nature of the error without identifying the error. The curious thing at this stage was that the learners over corrected themselves in some occasions, for example, *we have many kind of films* changes to

*we have many kinds of film or they don't have free time to talk with her husband changes to they don't have free time for talk with their husband.*

The next step constituted identification of the exact nature of the error.

*Teacher: a few is wrong here, you can't use it.*

*Learner: a few is wrong, aha! we should use a little*

*Teacher: Yes, a little. Why should we use a little?*

*Learner: Teacher, because it's uncountable. Free time is uncountable.*

*Teacher: Yes, it's uncountable.*

or

*Teacher: You can't use movies here.*

*Learner: teacher, why?*

*Teacher: Look, we have "movies" here and again another "movies" here in the same sentence. What should we do with the second movies?*

*Learner: I don't know.*

*Teacher: We should change it into what?*

*Learner: [saying nothing]*

*Teacher: into "ones"*

Some more examples of the correct form of the error the students made, were given to them. The last three sessions of the treatment consisted of providing the learners with lexical [related to movies], grammatical [articles, prepositions, making generalizations, pluralization] and cohesive devices [and, as well, in addition; but, however, on the contrary; so, thus, therefore] and pronouns [especially one, ones]

For the posttest, the learners were again asked to write a composition again on comparing American and Iranian movies. The analysis of the posttest compositions showed that the learners had improved in their writing ability, although differently, by providing a better text. They especially improved in making generalizations by

using the plural rather than singular forms [*I think action movies are so popular*], use of different cohesive devices instead of simple recurring ones such as and, so, but [*However, American horror movies are better than Iranian one's*] and use of the article.

## **Discussion**

This study shows that almost all participants had difficulties in their writing ability and were only able to perform better with mediator guidance. The individual difficulties experienced by the participants necessitated different types and amounts of mediation. The differences, in fact, indicated that the learners had different ZPDs which required the mediator to fine-tune his support differently to different learners. The important thing is that the actual independent performance level of the learners in the pretest stage did not show their ZPDs. That is, learners with the same type of error on the pretest, reacted differently to the mediation with some learners able to identifying the errors with an independent revision of their own writing or after initial hints from the teacher with others unable to identify the error until it was explicitly mentioned by the mediator. It need mentioning that the spelling was quite resistive to mediation and although some hints were given as to be careful about spelling mistakes, no change was observed in the amount of errors made in the pre- and post-test writing samples. This may be due to the unlimited domain of spelling. Concerning the vocabulary, mediation was successful, however, as an increase in using a couple of movie-related vocabulary was witnessed in the posttest writing sample. The grammatical aspect of writing including cohesion lent it most readily to DA intervention. Two reasons may account for this. Firstly, the number of grammatical errors dealt with in this study was limited to a couple of items such as cohesive devices, generalizations and pluralization. Secondly, they were quite frequent in the learners' writings because of the nature of the topic of the writing. The correct use of "the" was also witnessed when it was in the domain of generalizations. While none of the learners can yet fully understand the nature of writing in L2 and, therefore, still require mediation, their responsiveness to the mediation shows that their ability in doing so is improving. As a result, they proved to be ready for intervention in the writing skill provided that the developmental differences or ZPDs are taken into account.

## **Conclusion**

This study was an attempt to investigate the effectiveness DA intervention in identifying and supporting Iranian EFL learners' writing ability. It attempted to apply Aljaafreh and Lantolf's (1994) regulatory scale to the betterment of EFL writing skill. The findings in this study may be limited but they indicate that a DA approach can successfully improve EFL learners' writing ability. The results also suggest that a DA approach to writing enables the teacher to more accurately evaluate learners' writing skill and after identifying the nature of the error provide the learners with necessary support and, therefore, improve their writing.

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