

## **Promoting EFL Learners' Reading Comprehension Skills through Dynamic Assessment Using Guthke's Lerntest Approach**

Zohre Jarrahzadeh

Department of English, Najafabad Branch, Islamic Azad University, Najafabad, Iran

*Zohre\_Jarrahzade@yahoo.com*

\*Omid Tabatabaei

Department of English, Najafabad Branch, Islamic Azad University, Najafabad, Iran

*tabatabaeiomid@phu.iaun.ac.ir*

### **Abstract**

The current study was intended to investigate the impact of Dynamic Assessment (DA) on promoting reading comprehension ability of Iranian male and female EFL learners, focusing on Guthke's Lerntest approach. In this study, the researcher used DA which unifies instruction with assessment to provide learners with mediation to promote their hidden potential during assessment. In this action research project, Guthke's Lerntest approach was used to develop the reading comprehension skill classes that integrated mediation with assessment to support 60 Iranian EFL learners' reading skill. The Guthke's lerntest approach and the mediation design are presented in detail in this article. The participants' reading scores are presented to show the effect of Guthke's Lerntest approach on promoting Iranian EFL learners' reading performance. In addition, the participants' pre and post-test scores were compared to determine whether the participants revealed significant progress after receiving Guthke's Lerntest approach in reading comprehension setting. The findings showed that participants of experimental group significantly outperformed the one in the static way. In conclusion, the results of the study revealed that employing the Guthke's Lerntest approach can offer a new condition to enhance the EFL learners' reading comprehension ability and that doing research in this field can be beneficial for EFL learners, English instructors and other researchers in other fields.

**Keywords:** Guthke's Lerntest approach, DA, reading comprehension ability, Zone of Proximal Development

### **Introduction**

Since, one of the drastic issues which can be the most important components of all teaching programs consisting of language teaching is language testing and assessment; English instructors are required to use traditional Standardized static testing was the most popular approach towards assessing the language ability of EFL learners, which separated testing from teaching. Static assessment has the product-oriented nature, thus, the results of traditional assessment can only show the already existent abilities of the learners. In addition, Lidz (1995) observed that, traditional standardized assessment trails the learner's cognitive development to the point of failure in his or her independent functioning or static assessment in their classes.

Consequently, limitations of traditional psychometric assessment methods made instructors move toward DA as an alternative or supplemental approach. Stenberg and Grigorenko (2002) stated that, by the advent of DA, this tradition has been a paradigm shift which assumes teaching and assessment as being inseparable entities. They argued that it is not only a change to instruments and assessment procedures; but also, can be a switch towards a

new philosophy of assessment which emphasizes the role of intervention in helping individuals develop.

DA in its simplest definition means supporting learner development actively by understanding learner abilities. It enables the assessment of cognitive processes: ongoing tactics, strategies, habits and modes of thinking (approaching, defining and solving problems). It is an umbrella term in which its aim is to assess potential to learn a new skill rather than a static level of achievement. It does this by prompting, cueing or mediating within the assessment, and evaluating the enhanced performance. (Yildirim, 2008).

Dynamic Assessment (DA), which includes an instructional component, evaluates the process of learning (Haywood, Brown & Wingenfeld, 1990). In other words, it is based on the notion of assessment as a process rather than a product. DA is a development-oriented process which reveals a learner's current abilities in order to help them overcome any performance problems and realize their potential (Shrestha & Coffin, 2012). According to Ableeva (2010), DA is grounded in the Vygotskian concept of the Zone of Proximal Development (ZPD) and prescribes mediated teacher-learner dialog during the assessment procedure. DA is a relatively new approach to L2 assessment that has been introduced to L2 research and educational community by Lantolf and Poehner (2004) and Poehner and Lantolf (2005).

Vygotsky's theory basically suggests that "the focus should be on process instead of product, if we want to understand learning and development"(p.6). According to Lantolf and Thorne (2006, p.28), Vygotsky argued that studying the process, and not the outcome of development is the only appropriate way of understanding and explaining forms of human mental functioning. According to Vygotsky's socio-cultural theory as regards dynamic assessment, instruction and assessment should not be separated from each other. In other words, the real focus should be on what learners can achieve with the help of instructor or peers during the class activities instead of focusing on testing the learners' performance with a final achievement test. Because when learners are able to achieve a task with others, this shows that they will be able to achieve it by themselves in near future and this achievement proves that the internalization process has begun. (Yildirim, 2008, p.302).

Unfortunately, after some years of examining the principles of DA in the world; instructors are still using traditional assessment. In addition, Reading comprehension ability has mostly been evaluated through static assessment, but the problem is that static measures do not show specific instructional strategies for learning deficits, where exactly the learner has problem and what strategies and hints are needed to improve the learner's deficits (Haywood & Lidz., 1990). An important advantage of DA is making recommendations based on developmental potential which is not revealed by traditional non-dynamic tests (Davin, 2011). Christenson and Ysseldyke (1989) argue that the main goal of assessment is instructional intervention, rather than categorization of learners. Therefore, static assessment fails to address L2 learners' instructional needs or the responsiveness of a learner to instruction (Knodel, 1997).

Generally speaking, reading comprehension ability is one of the important skills which learners need to have mastery over, and assessing the learners' reading ability is one of the main responsibilities of the instructors and administrators. Knowing how to assess the process of reading helps the instructor to find out where learners have problems and need support. The uniqueness of this study lies in its attempt to address a currently problematic issue in second language learning, which is that of second language reading comprehension assessment. This study explores the impact of DA on the reading development and the possible implications of applying Guthke's Lerntest approach assessment model reading EFL classes.

### **Background**

Vygotsky's colleague Luria (1961) defined the term dynamic assessment in his English writing on Vygotsky's socio-cultural theory (SCT) of mind. The fact that human's capabilities are in a constant flux and quite sensitive to two primary sources of mediation i.e. , symbolic and physical tools that can feed the learning mechanisms discussed by Vygotsky and a procedure to tap such changing traits and abilities represented by dynamic assessment. Feuerstein et al, Guthke and Stein (1996), refers to dynamic assessment as "an assessment of thinking, perception, learning, and problem solving by an active teaching process aimed at modifying cognitive functioning"(p. 85) .

Vygotsky and his colleagues recommending that human cognitive functions are also mediated by which Vygotsky theory is known that human cognition is mediated socially through interaction with others and culturally through the use of cultural objects (Vygotsky, 1986). As individuals involving the activities that are intervened by others and by cultural objects, they are developed to what Vygotsky described as higher forms of consciousness that are unique to human. According to Vygotsky (1978), the child can be present by the socio-cultural environment with a variety of tasks and demands and engages the child in his world through the tools. Vygotsky (1978 cited Wertsch 1985) argues that as the first step, the child acquires knowledge through contacts and interactions with people (inter psychological plane), then later assimilates and internalizes this knowledge. Vygotsky claims that a transformation of what had been learnt through interaction is what also happens in schools, learners transform what teachers offer them during the process of appropriation.

The implications of ZPD for assessment were emphasized by Vygotsky himself, as in his research on IQ testing, but the concept of how development could be promoted through interactions that are sensitive to ZPD, allocated a great importance. There, Vygotsky defines the ZPD as " the distance between the actual development 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 peers" (Vygotsky, 1978, p. 86). This definition suggests that learning can be greatly facilitated in interaction between learners and peers or a more knowledgeable person and it helps develop the necessary mental functioning in social interaction within ZPD (Brown, 2004).

Regarding to (Feuerstein, Jennet, Guthke&Wingenfeld, 1992) dynamic assessment is not a new approach to psychological and educational assessment; in fact, some of its applications have been around for more than a half century. The ultimate goal of dynamic assessment is to provide information crucial for effective remediation, and is not provided by traditional non-dynamic assessment tests. Lidz(1995) observed that dynamic assessment leads the child to the point of achieving success in mediated performance because it aims at identifying obstacles to more effective learning and performance, to find ways to overcome those obstacles on subsequent learning and performance effectiveness. The interventionist and interactionist models to represent two general orientations of dynamic assessment were identified by Lantolf and Poehner(2004). Whereas interactionist dynamic assessment focuses on an individual learner or a group of learners without concern for predetermined endpoints, interventionist dynamic assessment is concerned with quantifying the amount of support required for the learner to reach pre-specified endpoints. A number of research studies have been done on dynamic assessment and language improving skills. In the paper titled" A comparative study of the impact of DA models on the writing ability and attitude of Iranian EFL learners" Hassaskhah and Haghparast (2012) disclosed the results of their research " DA is considered superior to traditional assessment approaches in that it takes into account the individual differences between the learners,

additionally it is development referenced". Naeni and Duvall (2012) assessed dynamic assessment on reading comprehension sub- skills and used a mixed method to study the improvements in reading comprehension performance of 10 university students by applying the mediation of dynamic assessment approach to instruction and assessment. The mediation phase of their study included three inter nation sessions each on one particular reading comprehension sub-skills among three which were finding the main idea, inference and finding out the meaning of unknown words. Their findings reveal significant improvement in the reading comprehension performance of the participants after the mediation.

Guthke and his colleagues at Leipzeig University have built upon Budoff's work in the development of a number of their own dynamic assessment procedures, which they refer to collectively as the Lerntest (Guthke, 1982), or more recently as the Leipzeig Learning Test (LLT). As most of the English learners have problems with regard to understanding, answering the reading questions, finding the main idea or guessing the meaning of new words, so these sequential hints will be useful and tangible to reach the best and correct answer of reading comprehension. If an examinee's first attempt to complete the sentence is incorrect, the examiner is provided with the following vague hint: " That's not correct, please, think about it one again". If the second attempt is also unsuccessful, the examiner offers a more explicit hint: " That's not correct. Think about which answers are most relevant to the one you are trying to complete". If the third attempt fails, the examiner offers an even more explicit hint: " That's not correct. Let's look at option three and four". If the response is still inaccurate, a very explicit hint is offered: " That's not correct. Let's look at option four and focus on the differences in both the positions of the objects and the words". At this point, the examinee will move on to the next item on the test. The same standardized set of prompts is used throughout, while the items become increasingly complex.

Limited number of studies mentioned above with all the promoting results imply the more studies are needed in the field of language learning in order to better understanding the effects of dynamic assessment on language learning and in order to provide more guidance to language instructors or syllabus designers who wish to use dynamic assessment in their language classrooms and their tests. The present study therefore aimed at filling some part of the gap in dynamic assessment by investigating the impacts of dynamic assessment on Iranian EFL learner's reading ability. No study has previously investigated the role of Guthke'sLerntest Approach on reading comprehension ability on Iranian EFL learners so far. Thus, based on what mentioned above, the following research question can be perused:

Does the application of Guthke's Lerntest approach in DA lead to better improvement of Iranian EFL learners reading performance?

## **Methodology**

### **Participants**

60 participants were chosen from among 140 male and female Shahrekord Azad University students who majored in Veterinary medicine. The participants were selected from among second-semester students. After applying the Quick Placement Test (QPT), they were assigned into four groups, two control and two experimental groups, each consisting of 15male and 15 female learners. The participants were selected based on their scores on the proficiency test. It is remarkable that, just experimental groups were subjected to the interventionist model of dynamic assessment. The mean ages of the participants were between 20 – 25, their first language was Persian, and none had studied the English language abroad.

## **Instruments**

The Oxford Quick Placement (QPT) version 2, by University of Cambridge Local Examination Syndicate was administered. This test is valid, reliable and a highly effective instrument in grouping learners into appropriate levels. It can also be used as a quick measurement of learners' general language proficiency. In addition to the placement test, reading comprehension test was administered to determine homogeneity the reading ability of learners. The TOFEL Reading Comprehension and Vocabulary Workbook by Elizabeth Davy and Karen Davy were employed to carry out the test. The test consisted of four reading comprehension texts which each one included 5 multiple choice and vocabulary questions; 3 items on reading texts and 2 items on vocabulary part. Finally, the attitude questionnaire which consisting of Sixteen statements were written by the researcher to obtain the learners' attitudes toward being assessed through dynamic assessment, Guthke's Lerntest approach.

## **Procedure**

Both experimental and control groups took part in reading comprehension class, but just experimental groups were subjected to interventionist model of DA on their reading texts. To provide DA groups with mediation, Lantolf and Poehner's (2011) scale was adopted on the basis of forms of mediation. If a learner's response was correct, the mediator gave no mediation. However, if the learner's response was not correct and/or in appropriate, the mediator moved one or more steps further till the last step where she/he had to provide the learner with full explanations. In fact, to run DA a list of standardized hints were used during reading test, the treatment group received intervention that is Guthke's Lerntest approach which is famous for Leipzig Learning Test (LLT) (Guthke& Beckmann,2000).

If examinee's first attempt to reach the answer was not successful, the instructor would say: " That isn't correct, think about it again, please" if the second attempt was also incorrect, the instructor offered more explicit hints"; Think about which options are most relevant to complete the answer". If the third attempt failed, the examiner offered more explicit hint: " That's not correct. Let's look at options three and four. If the answer is still inaccurate, a very explicit hint is offered: " That isn't correct- let's look at rows three and four and focus on differences in both the positions of the sentences and the words if this way is not successful to produce the correct response, the examiner provides the correct sentence and explains why it is correct, , but at this stage, the two control groups were assessed in reading comprehension class but in the static way, i.e. without any feedback or intervention to find out the correct answer during reading comprehension texts. After these stages, a post-test was given to the intermediate level and at last, a questionnaire comprising 16 items were given to the experimental groups to elicit their attitudes towards Guthke's Lerntest approach on the improvement of reading comprehension ability.

## **Results**

To answer the research question, which asked whether applying Guthke's Lerntest approach in DA lead to better improvement of Iranian EFL learners reading performance, the four groups of learners' scores on the reading posttest were compared. The results of this analysis are presented below.

### **Table 4.1. Descriptive Statistics of the Reading Posttest**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	Minimum	Maximum	
					Lower Bound	Upper Bound		
EGM	15	18.6000	.98561	.25448	18.0542	19.1458	17.00	20.00
EGF	15	19.1333	.83381	.21529	18.6716	19.5951	18.00	20.00
CGM	15	15.8667	1.64172	.42389	14.9575	16.7758	14.00	19.00
CGF	15	16.5333	1.12546	.29059	15.9101	17.1566	15.00	18.00
Total	60	17.5333	1.79893	.23224	17.0686	17.9980	14.00	20.00

Table 4.1. Shows that the mean score of the EGM students ( $M = 18.60$ ), EGF students ( $M = 19.13$ ), CGM ( $M = 15.86$ ), and CGF students ( $M = 16.53$ ) were different from one another. Yet, to see whether the differences among these four mean scores were not statistically significant, one had to consult the *Sig.* column in Table 4.2 below.

**Table 4.2.** *One-Way ANOVA Results of the Reading Posttest*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	112.133	3	37.378	26.563	.000
Within Groups	78.800	56	1.407		
Total	190.933	59			

The ANOVA table just shows whether there is a difference or not. It however, does not show where the differences lie. Table 4.2 somewhat delineated the differences among the four groups: The two experimental groups outperformed the two control groups. This conclusion, nonetheless, cannot be taken as robust unless more rigorous pieces of evidence support it. Thus, the pot hoc Shceffe test results need to be considered.

**Table 4.3.** *Post Hoc Scheffe Test Results of the Reading Posttest*

	Mean Difference	Std. Error	Sig.	95% Confidence Interval		
				Lower Bound	Upper Bound	
EGM	EGF	-.05333	.43315	.680	-1.78	.715
	CGM	2.7333*	.43315	.000	1.48	.3.98
	CGF	2.0666*	.43315	.000	.818	3.31
EGF	EGM	.5333	.43315	.680	-.715	1.78
	CGM	3.2666*	.43315	.000	2.01	4.51
	CGF	2.6000*	.43315	.000	1.35	3.84
CGM	EGM	-2.7333*	.43315	.000	-3.98	-1.48
	EGF	-3.2666*	.43315	.000	-4.51	-2.01
	CGF	-.6666	.43315	.505	-1.91	.581

CGF	EGM	-2.0666*	.43315	.000	-3.31	-.81
	EGF	-2.6000*	.43315	.000	-3.84	-1.35
	CGM	.6666	.43315	.505	-.581	1.91

As is depicted in Table 4.3, the difference between EGM and EGF students was not statistically significant since the values under *Sig.* in front of EGM-EGF was found to be more than the significance level (.680 > .05). However, the difference between the EGM and the two control groups was statistically significant (.000 < .05). So was the difference between the EGF and the two control groups (.000 < .05). This means that the two experimental groups outperformed the two control groups. In other words, the treatment (i.e. applying Guthke's Lerntest approach in DA) was effective and led to the improvement of the experimental groups' reading comprehension.

### Conclusion

Based on findings drawn from the results, the present study has important implications for instructors, syllabus and test designers. By using this approach, on one hand, instructors are able to obtain information, recognizing the weak points of learners and provide them crucial cues and solutions to overcome the difficulties of learners' reading skill. On the other hand, this study has offered some new insights and new picture of reading performance for learners; hence, learners can be motivated and reduced stress during the exam and later on.

As the findings indicated, assessing learners' reading skill through DA and Guthke's Lerntest approach has a positive effect on the learners' reading ability performance. Guthke's Lerntest approach was found to be an impressive method of assessing learners' reading comprehension ability. Dynamic assessment has been shown to be an effective means of determining the performance of learners, therefore, it can be concluded that DA results in presenting a true view of the capabilities and self-regulating which is the first and the most important goal of assessment.

The results of the study revealed a significant improvement of reading performance with a statistical increase in the reading scores of the groups being assessed dynamically through Guthke's Lerntest approach. The findings were in line with the findings of some similar previous studies such as Poehner (2008), Birjandi, et al (2011), Ajideh and Nourdad (2012), Tajeddin and Tayebi pour (2012), Ebrahim Isavi (2012), Naeni and Duvall (2012), and Sahbi Hidri (2014). All reported results similar to the findings of the present study emphasizing that DA improved the abilities of participants in reading comprehension and other skills under investigation. In this study, the treatment groups outperformed the control groups. Learners significantly benefited from treatment using the Guthke's Lerntest approach.

### References

- Ableeva, R. (2007). Assessing listening for development. In R. Alanen and S. Poyhonen (Eds.), *Language in action. Vygotsky and Leontievan legacy today*, 352-379. Cambridge Scholars Publishing.
- Ableeva, R. (2008). The effects of dynamic assessment on L2 listening comprehension In J. P. Lantolf and M. Poehner (Eds.), *socio-cultural theory and the teaching of second language*, 57-86. London: Equinox Press.
- Ableeva, R. (2010). Dynamic assessment of listening comprehension in second language learning (Doctoral dissertation, Pennsylvania State University, 2010). 3436042

Ajideh, P., & Nourdad, N. (2012). The immediate and delayed Effect of dynamic assessment on EFL reading ability. *English Language Teaching Journal*, 12, (5), 141-151.

Ajideh, P., & Nourdad, N. (2013). Dynamic assessment revealing individual differences in EFL reading comprehension ability. *International J. Soc. Sci. & Education*, 3, (2), 340-350.

Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal*, 78, 465-483.

Anton, M. (2009). Dynamic assessment of advanced second language learners. *Foreign Language Annals* 42(3), 576-598.

Budoff, M. (1974). Learning potential and educability among the educable mentally retarded (Final Report Project No. 312312). Cambridge, MA: Research Institute for Educational Problems, Cambridge Mental Health Association.

Birjandi, P., Daftarifard, P., & Lange, R. (2011). The effects of dynamic assessment on Rasch item and person hierarchies in second language testing. *International Journal of Language Studies*, 5, 125-140.

Birjandi, P. (2012). Dynamic assessment (DA): An evolution of the current trends in language testing and assessment. *Theory and Practice in Language Studies*, 2(4), 747-753.

Brown, A., & Campione, J. (1984). Three faces of transfer: Implications for early competence, individual differences, and instruction. In M. E. Lamb, A. Brown & B. Rogoff (Eds.), *Advances in developmental psychology*, 3, 143-192.

Brown, A. L., Campione, J. C., & Day, J. D. (1981). Learning to learn: On training students to learn from texts. *Educational Researcher*, 10(2), 14-21.

Brown, A. L., & Ferrara, R. A. (1985). Diagnosing zone of proximal development. In J. Wertsch (Ed.), *Culture, communication and cognition: A Vygotskian perspective*, 35-52. Cambridge, MA: Cambridge University Press.

Campione, J. C., & Brown, A. L. (1987). Linking dynamic assessment with school achievement. In C. S. Lidz (Ed.), *Dynamic assessment: An interactional approach to evaluating learning potential*, 82-115. New York, NY: Guilford.

Kozulin, A. & E. Garb. (2002). Dynamic assessment of EFL text comprehension of risk students. *School Psychology International*, 23, 112-127.

Lantolf, J. (2000). Introducing sociocultural theory. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning*, 1-26. Oxford: Oxford University Press.

Lantolf, J. P., & Poehner, M. E. (2004). Dynamic assessment of L2 development: bringing the past into the future. *Journal of Applied Linguistics*, 1(2): 49-72.

Lantolf, J. P., & Poehner, M. E. (2008). *Sociocultural theory and the teaching of second languages*, London, Equinox.

Lantolf, J.P., & Poehner, M.E. (2011). Dynamic assessment in the classroom: Vygotskian praxis for second language development, *Language Teaching Research*, 15, 11-33.

Lidz, C.S., & Gindis, B. (2003). Dynamic assessment of the evolving cognitive functions in children. In A. Kozulin, B. Gindis, V.S. Agayev, & S.M. Miller (Eds.). *Vygotsky's educational theory in cultural context*. Cambridge: Cambridge University Press.