

The Effect of Dynamic Assessment on Iranian EFL Students' Critical Reading Performance

(Kesan Penilaian Dinamik terhadap Penguasaan Pembacaan Kritikal Pelajar EFL Iran)

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ABSTRACT

The main purpose of this research was to investigate the impact of Dynamic Assessment-based instruction on the development of critical reading through an interventionist approach and based on quasi-experimental research design. For selection purposes, PET (Primarily English Test) was used and 61 male students were chosen out of 80 male students. 30 students were included in the experimental (DA) group and 30 students were chosen for the control (Non-DA) group. All assessment sessions and the enrichment program (EP) sessions took place within a thirteen-week period, excluding a week of break. The mediation procedures were based on the Graduated Prompt Method. Before the EP sessions, the critical reading and vocabulary sections of the new SAT were administered statically to students in both groups as a pre-test. The reading passages were selected from sample tests of SAT and also were ranked using Flesh Reading Scores based on their degree of difficulty. After having 10 EP sessions, the same test was administered dynamically as a post-test to the DA group and statically to the Non-DA group. A month later, a far transfer assessment test was administered dynamically to the DA group. The Data were analyzed through independent T-tests, a set of one-way ANOVA and Pearson Correlations. The results showed that there was a significant difference in scores for DA group post-test and Non-DA group post-test. Additionally, there was a strong correlation between DA and transfer assessment scores. It was concluded that the participants' performance improved significantly on the DA posttest and far transfer assessment tests.

Keywords: Dynamic assessment; critical reading; enrichment program; transfer assessment

ABSTRAK

Tujuan utama kajian ini adalah untuk mengkaji kesan pengajaran berasaskan penilaian dinamik kepada pembangunan bacaan kritikal melalui pendekatan campur tangan dan berdasarkan reka bentuk kajian kuasi-eksperimen. Untuk tujuan pemilihan PET (terutamanya English Test) telah digunakan dan 61 pelajar lelaki daripada 80 pelajar lelaki telah dipilih sebagai responden kajian. 30 pelajar termasuk dalam kumpulan eksperimen (DA) dan 30 pelajar dipilih untuk kawalan kumpulan (Non-DA). Semua sesi penilaian dan sesi program pengayaan (EP) berlaku dalam tempoh 13 minggu, tidak termasuk satu minggu rehat. Prosedur penghantaran adalah berdasarkan Kaedah Menamatkan Pengajian. Sebelum sesi EP, kritikal membaca dan perbendaharaan kata bahagian SAT baharu telah ditadbir secara statik kepada pelajar di kedua-dua kumpulan sebagai pra-ujian. Beberapa petikan membaca telah dipilih daripada ujian sampel SAT dan juga kedudukan menggunakan Flesh Scores Reading berdasarkan ijazah kesukaran. Selepas 10 sesi EP, ujian yang sama ditadbir secara dinamik sebagai pos-ujian untuk kumpulan DA dan statik kepada kumpulan Non-DA. Sebulan kemudian, satu ujian pemindahan penilaian ini telah ditadbir secara dinamik untuk kumpulan DA. Data dianalisis melalui ujian-t, satu set satu hala ANOVA dan Pearson korelasi. Hasil kajian menunjukkan bahawa terdapat perbezaan yang signifikan dalam skor untuk DA kumpulan ujian pos dan bukan DA kumpulan ujian pos. Selain itu, terdapat korelasi yang kuat antara DA dan markah penilaian pemindahan. Dapat dibuat kesimpulan bahawa prestasi peserta meningkat dengan ketara pada pasca DA dan ujian penilaian pemindahan ini.

Kata kunci: Penilaian dinamik; pembacaan kritikal; program pengayaan; penilaian pemindahan

INTRODUCTION

Language assessment and language teaching are inextricably intertwined. A longstanding concern in applied linguistics and in education has been the relationship between assessment and instruction. Concerns over “teaching to the test”, “narrowing of the curriculum” and the “power” that

tests have to influence and even control the instructional practices suggest that teaching and assessment are generally viewed as separate and in some cases oppositional activities (Linn 2000; Lynch 2001; McNamara 2001; Moss 1996; Shohamy 1998, cited in Pohner, 2005). However, an approach known as ‘dynamic assessment’ (henceforth DA), which is grounded in socio-cultural theory has attempted to

integrate assessment into instruction. This feature is, in fact, what distinguishes DA from 'non-dynamic assessment'.

Dynamic Assessment with its own particularities and peculiarities is based on the theory of development outlined by the famous Russian psychologist, L.S. Vygotsky. In other words, DA is grounded on the important insight that in the ZPD instruction leads to development. While studying the development of children's mental abilities, Vygotsky (1978) observed that what a child is able to do independently only represents a tip of the iceberg; that is, a partial picture of the child's full capability, because the child can often do more when just a bit of assistance, or mediation, is offered by someone else. According to Vygotsky, what the child is able to do autonomously represent a view of the child's past development, but what the child is able to achieve with mediation, provides insight into the child's future development. Vygotsky described the difference between what a child can do autonomously and what the same child can accomplish with mediation, by what he labeled the Zone of Proximal Development (ZPD). He defines ZPD as the distance between the actual developmental level as determined by independent problem-solving under adult guidance or in collaboration with more capable peers.

Based on the notion of ZPD, therefore, DA seeks not to describe performance constituents but to engage in dialogue with learners in order to arrive at a diagnosis of the sources of performance problems and a prognosis for their remediation based on learner responsiveness during the interaction (Pohner 2008). This metaphor is based on the notion of assisted performance; as opposed to traditional approaches that only manifest the actual level of development at any point in time, this one is forward-looking in which it is believed that the assisted performance and its quality can be the manifestation of the future performance of the individual. Moreover, since DA is rooted in the ZPD, it insists that any assessment that fails to determine the extent to which the person's performance is 'modifiable' is incomplete.

To this end, following social constructivist views toward assessment (Vygotsky 1975; Feuerstein 1979), this study intends to explore whether strategy awareness (mediation) at the particular level of examinees' cognitive development can assist them to understand and apply those strategies that potentially exist in their cognition structures as capabilities, but have never explicitly emerged in their true abilities. In other words, whether strategies and techniques needed in critical reading tests can be acquired by the scaffolding and mediation or not. Additionally, as Luria (1961) stressed, development cannot be limited to mastery of a single task or test, but must consider the individual's ability to transfer what has been internalized through assistance beyond the task to other circumstances.

This article draws on theoretical and empirical research from outside the mainstream paradigm in order to offer an alternative perspective on assessment and its relevance to teaching and learning based on the

sociocultural theory of mind. In particular, it studies the effect of Dynamic Assessment on the teaching and in particular on the assessment of critical reading done by Iranian EFL students.

To put it differently, this study explores the feasibility of developing and implementing the DA procedures in a Teaching English as a Foreign Language (TEFL) context. Vygotsky's (1978) notion of the Zone of Proximal Development serves as a theoretical base for the construction of the assessment procedures. The results of this research may illustrate whether the dynamic procedure provides any information on students' learning over and beyond what is available from the static tests. They may also confirm whether the DA score is really the indicator of the true zone of proximal development for each subject.

Thus, considering the fact that DA foregrounds future development with the examiners intervening in the assessment process, this study intended to examine the suitability of this approach through a specific form of feedback-mediated assistance (Sternberg & Grigorenko 2002) in developing the critical reading ability of EFL learners. To this end, the following research questions that guided this study were asked:

1. Is there a significant difference in the total post intervention reading test scores between DA and Non-DA groups?
2. Does Mediation influence the effectiveness of DA to improve Critical Reading?
3. Is there a positive correlation between post-intervention DA group scores and transfer assessment scores?

REVIEW OF LITERATURE

CRITICAL READING

Reading as the most important academic language skill for second language students can lead to their professional, social, and personal development. This skill, though, is a complex and dynamic phenomenon and is often considered as an important source of language input which involves a special interaction between the reader, the author and text Sweet (1993). To successfully read, comprehend and respond to the reading, therefore, the reader needs to be equipped with certain skills and ability types. Reading, itself, occurs at three different levels which are interconnected. In other words, the readers usually start to read the lines first to grasp the message put forth by the writer, then they should be able to read between the lines to get the implied message not directly given in the passage, and at a higher level, they should read beyond the lines. This last type of reading which involves some higher order thinking as Bloom (1965) states is what is often called critical reading.

Critical reading is defined as the ability to evaluate the credibility of a piece of writing. All writers have a purpose in writing, and usually, a writer will choose to support

his or her purpose on the basis of their own knowledge and conceptualization of the topic. Wallace (2003) and Sweet (1993) define critical readers as active readers who question, confirm, and judge what they read throughout the reading process. In other words, to read critically, one must actively recognize and analyze the evidence given by the author. The reader should also be able to recognize the author's purpose, to understand tone and persuasive elements and to recognize bias. It is important to note that this is not going to be an easy task since not all of these goals actually refer to something found on the page; in other words, learners are required to make inferences from evidence within the text. Thus, critical reading may involve the analysts replacing the tyranny of the text with their own imposed interpretations (Wallace 2003). Wallace (2003) points four principles in critical reading:

1. Critical reading represents a challenge to the skills-based orientation of many cognitive psychological models which emphasize the building of discrete kinds of abilities based.
2. Critical reading does not see non-native speaker readers in their reading of authentic, non-pedagogic texts, as necessarily disadvantaged – on the contrary.
3. Critical reading does not privilege an author's communicative intent but is concerned with effect. Finally and most importantly, critical readers do not just comment meta cognitively, showing awareness of cognitive strategies they make use of but also meta critically.

INTERVENTIONIST L2 DA VS. INTERACTIONIST L2 DA

Scrutinizing the DA literature can provide us with different models and approaches which are briefly sketched here: Lantolf and Poehner (2004) proposed the terms interventionist and interactionist to represent two general orientations of DA. The interventionist DA is rooted in Vygotsky's quantitative interpretation of ZPD as a different score. This approach lends itself more to a psychometric orientation in which Budoff's "learning potential assessment" and Brown's graduated prompt' approach are renowned. Moreover according to Lantolf and Poehner's (2007), an interventionist approach might use reminders, hints, and leading questions that are weighted differently depending upon their level of explicitness. Unlike, interactionist approaches follow Vygotsky's preference for "qualitative assessment of psychological processes and dynamics of their development" (Minick 1987). To Lantolf and Poehner (2007), the distinction between interactionist and interventionist is characterized by the different kind of mediation each provides.

REVIEW OF RELATED STUDIES

There have not been extensive research studies on dynamic assessment regarding reading. Kozulin and Garb's study

(2001) explored the feasibility of the development and implementation of the dynamic EFL assessment procedure with at-risk students. Following an interventionist test-mediation- retest design, they assessed the students' ability to learn and use effective strategies during reading comprehension. First, the students were given a static test. Then, the teacher reviewed the test with the students, mediating for them the strategies required in each item and telling them how to transfer strategies from one task to another. Finally, a retest was administered to indicate how students benefited from the mediation. The results indicated that the procedure is both feasible and effective in obtaining information on students' learning potential. In other words, students with similar performance levels demonstrated differently in the post-test.

Naeini and Duvall (2012) investigated a study aimed at studying improvements in English Language Training (ELT) university students' reading comprehension performance by applying the mediations of a DA approach to instruction and assessment. In this mixed methods study, DA procedures were conducted with 10 ELT university students. Participants took part in a pretest-mediation-posttest design study. The devised pre and posttests had high reliability estimates. The mediation phase included three intervention sessions, each focused on a particular reading comprehension sub skill. The descriptive and analytic analyses of the results revealed dramatic, measurable progress in participants' reading comprehension performance.

Taheri (2006) explored the feasibility of development and implementation of dynamic assessment procedure in the areas of EFL reading comprehension and metacognitive awareness of reading strategy. A statistically significant effect was found for the performance of the participants in the experimental group who had received mediation. Although the aforesaid studies have already been done regarding reading skill, they have had just scant attention to the reading skills and not on critical reading. On the other hand, the researcher could not find any research regarding DA on critical reading since February 2016.

METHODOLOGY

PARTICIPANTS

In order to select the participants, the non- random purposive sampling method (Mackey & Gass 2005) was administered. First and foremost, 80 Iranian learners of two high -intermediate intact classes were chosen. By the same token, 61 male students were chosen (one standard deviation below and one standard deviation above the mean) out of 80 male students and named High intermediate selected via PET as the experimental group (DA) and 30 students were chosen for the control group (Non-DA). The learners' status being "High-intermediate" was determined by an independent measure of language proficiency. All 31 subjects took part in a class called a

“Critical Reading Class” at the Institute. Hence, critical reading means a communicative class which focuses on reading critically. Thus, the class was designated to the research objectives. The critical reading classes were held once a week with each session lasting 105 minutes in 10 sessions for both groups. In fact, the class for the experimental group was taught dynamically and for the control group was taught non-dynamically. Ten sessions (10 weeks) were designated to mediation and treatment. The mediation procedures used in these groups (experimental groups) were based on Kozulin and Garb’s (2001) study.

The participants all spoke Persian as their mother tongue and were chiefly from middle socio-economic background, ranging from 14 to 27 in age. Students’ participation in and contribution to classroom discussions and activities on critical reading skill and vocabulary were the main assessment criteria in these classes.

The researcher, who taught both experimental and control groups, was an MA holder of TEFL. He has had a long experience of language teaching institutionally and academically. The researcher had taken part in plenty of workshops at Iran Language Institute and plenty of conferences and had studied the mediation processes of DA for more than a year.

DESIGN

Although researchers have elaborated on a number of models and approaches to DA (Budoff 1987; Guthke 1993; Carlson & Wiedl 1992), this study followed Kozulin and Garb’s (2001) interventionist approach with some modifications to meet the specified needs. Kozulin and Garb’s (2001) sought to explore the effect of DA on the EFL text comprehension of at-risk students. During the enrichment program, mediation was divided into two stages: Part 1 involved manipulation of grammatical, lexical and sentence structure conventions. An “information page” was constructed for students to take home and revise. Part 2 included four texts, increasing in length and complexity, with questions designed to test comprehension. With some changes, i.e. the population, age, material, and institution, the design was characterized by an NDA elicitation stage followed by a mediation process phase (DA intervention).

Regarding the setting and participants in which the research occurred, the interventionist approach was better than the interactionist approach in this study. “Both approaches (the interactionist and the interventionist) have advantages, and the approach one chooses to follow should depend on one’s goals and available resources. For instance, if one wishes to administer DA to large numbers of applicants in order to place students at the appropriate level in a foreign language program, an interventionist approach might be more feasible because it is easier to score and learners’ result can be readily compared (Lantolf & Poehner 2007).”

A major method of implementing DA in this research was the Graduated Prompt method, (aka GPA) which was developed by American researchers Campione and Brown. “The GPA is a variation of interventionist DA in the cake format. This method involves first developing a hierarchy of prompts that are graduated, that is, arranged from most implicit to most explicit. The prompts are standardized with no room for deviation. An especially important feature of GPA and one which sets it apart from other approaches (Testing-the-Limits), is the inclusion of transfer tasks intended to determine how well students can extend their learning beyond the assessment (ibid p. 54)”.

The method used in this study was in line with Kozulin and Garb’s (2001) sandwich format, i.e., test –teach –test paradigm. In addition, a follow-up far transfer assessment was conducted to uncover the learner’s ability to use (or transfer) newly acquired knowledge to “novel problems” or context. During the enrichment program, mediation was offered through hints, prompts, questions, suggestions and explanations.

TRANSFER ASSESSMENT

To establish the extent to which participants could internalize and extend the mediation provided in the course of previous sessions, a transfer session was administered. The transfer session was held precisely after a month of administering the post-test (21st of October 2011).

Transfer involves determining whether or not learners have appropriated the mediation from DA and can carry out new tasks either independently or with much less assistance than at the outset process (ibid). Poehner (2005) conducted two transfer assessment (TA) tasks in his study; likewise, Abeleva (2010) administered three TAs in his dissertation. The chief rationale choosing one TA in the present study was that the researchers consulted Professor Lantolf electronically and he recommended that the mediator combine two standardized tests, SAT and TOEFL, together. More precisely, he urged that the mentor utilize the SAT’s critical reading section and use the vocabulary part of TOEFL as follows: “The key element is to select more difficult tasks in such a way that difficulty is in comprehension rather than vocabulary. When Kozulin and Garb (2001) prepared their tasks, they simplified the vocabulary while keeping the structures increasingly more complex. I suggest that you do the same. You may use SAT or any other materials but make sure that difficulty is not of vocabulary (James Lantolf, E-mail communication, 25 September 2011).”

To minimize the influence of vocabulary, TOEFL was used for the vocabulary section of the transfer assessment. It should be noted that according to Lantolf’s perspective the critical reading which was chosen was much more complicated than the post-test. On the other hand, the vocabulary section of the TA was a lot easier than the post-test.

A final point regarding the TA concerns the enrichment and no-enrichment learners. The TA was prepared to pinpoint how well the enriched learners could extend, or "transfer," the abilities they had developed through their interventions with the mediator to novel problems.

In sum, all learners in the present study underwent a static and a dynamic assessment at the beginning and at the end of the enrichment program. Additionally, the DA participants also did a transfer assessment.

Each assessment, along with the type of mediation and the properties of the task, is summarized in Table 1.

INSTRUMENTATION

The materials used in this study and the tasks that learners engaged in include:

1. PET exam: The PET, which stands for Preliminary English Test assessing all four commands of language at an intermediate and High Intermediate levels for schools, was administered to diagnose participants' proficiency levels.
2. Critical Reading Pamphlet: The critical reading pamphlet a combination of different SAT and critical reading skills preparatory books, was prepared for the mediation and treatment classes. The pamphlet contained different critical reading strategies, miscellaneous types of vocabulary items (academic and bombastic words) and sundry long and short reading comprehensions.
3. SAT exam: The SAT (Scholastic Aptitude Test) as defined by Wikipedia (2011) is a standardized test for college admissions in the United States. The Critical Reading of the aforementioned test was used. In spite of being formerly developed, published, and scored by the Educational Testing Service (ETS) which still administers the exam, twenty six critical reading passages of SAT were computed via Readability Formulas and from among them twelve reading passages were chosen for pre-test, post-test and transfer assessment tests. Also, the Flesch Reading scores were between 0.68 and 0.80, and 0.45 and 0.65 for pre-test, post-test, and transfer assessment

tests respectively. Furthermore, all the psychometric analyses, validation processes and pilot study were conducted for pre-test, post-test, and a transfer assessment task. All tests were computed via KR-21 formula to estimate their reliabilities. The reliability indices were 0.85, 0.87, and 0.86 respectively.

4. TOEFL exam: The vocabulary part of TOEFL (Test of English as a Foreign Language) was administered to assess the test of vocabulary items on "Transfer Assessment Task." It is imperative to note that the transfer strategy test the combination of the SAT and the TOEFL. Thus, the critical reading passages of the SAT and the vocabulary part of TOEFL were administered to the transfer assessment task. It is urgent to say that the idea of developing such a test came out of James Lantolf's creativity. As a matter of fact, the researcher received Lantolf's confirmation via email. The aforesaid test was much more sophisticated than the post-test regarding its nature.

PROCEDURES

All assessment sessions and the enrichment program (EP) sessions took place within a thirteen-week period (14th of July 2011-21st of October 2011), excluding the week of break: September 9th-19th. The assessment sessions were conducted on an individual basis whereas the EP sessions were conducted in a group format. Despite the fact that the researcher found this approach quite in line with Poehner's (2005) suggestion that for a DA procedure there was no need to administer an NDA test separately, he administered a separate test (PET exam) to diagnose learners' Flexible Intervention level of proficiency. The PET was administered one week before the mediation and treatment of classes began (14th of July 2011).

The aforementioned overall design was categorized into three phases, an NDA elicitation stage which aimed at identifying the class and individuals' ZAD or current status and a DA intervention process. The NDA elicitation stage acted as a pre-test since it helped spot the students' independent performance abilities through administering

TABLE 1. Experiment design: Assessment and enrichment program sessions*

Assessment	Task Description	Mediation offered
PET	Diagnosing learners' level of proficiency	None
Pre-Test for both DA Non-DA groups	Administering SAT via Static Assessment	None
Enrichment program (10 weeks)		
Post-Test Non-DA	Administering SAT via Static Assessment	None
Post-Test DA	Administering SAT via Dynamic Assessment	Flexible Intervention with the mediator
Far Transfer Assessment	Administering a newly developed SAT and TOEFL via Dynamic Assessment	Flexible Intervention with the mediator

*Partially adapted from Poehner (2005).

**Mediation or Flexible interventions involved researcher's leading questions, implicit and explicit hints, prompts, explanations.

SAT. It is worth mentioning that all psychometric analyses were done and elaborated on in the Instrumentation part.

At the outset of the mediation and treatment SAT was administered for both DA and Non-DA classes statically (21th of July 2011). In fact, it was conducted without any hint and prompt. Immediately following this stage, a mediation phase started in order to find out how scaffolding can help promote learners' critical reading (21th of July 2011). As mentioned earlier, the mediation included hints, prompts, questions, suggestions, and explanations.

The material selected for classroom practice was the critical reading pamphlet. The pamphlet represented a communicative approach which worked on critical reading and thinking, vocabulary items, various techniques for how to boost vocabulary, varied tactics for reading comprehension. The pamphlet was instructed through an organized syllabus. The syllabus contained all activities which were done in the mediation class.

The students were asked to read the reading parts and provide the main idea or a summary, giving synonyms and antonyms or a paraphrase of the passage. The students were checked at times on the meaning of specific words and phrases. Nonetheless, the lists of vocabulary items were given to the learners in advance. This technique was used in order to avoid unnecessary explanations of some vocabulary items so that the time of class could be used properly.

Following the NDA elicitation stage which gave us an understanding of our learners' ZAD, during the mediation phase the mediator read the passage aloud, but this time the assessment procedure was dynamic; i.e., upon the students' failure to provide correct answers, the teacher intervened and mediated in the students' understanding of the passage. During mediation question words, the auxiliary verbs, and the Subject-Verb-Complement (SVC)

structure of normative sentences, synonyms, antonyms and question forms were considered and taught. Whenever the students encountered difficulties in understanding the content of the reading passage, the teacher provided them with a wide range of consciousness raising prompts and reminders to assist them in noticing the available syntactic, semantic, and pragmatic cues that typically take the following forms:

Let's read again.

1. What is the subject, verb, object, and so on and so forth?
2. Pay attention to the context.
3. Pay attention to the collocations.
4. What does "it" refer to?
5. What was the preceding sentence?

DATA ANALYSIS

THE NULL HYPOTHESIS: THERE IS NO STATISTICALLY SIGNIFICANT DIFFERENCE IN THE POST INTERVENTION READING TEST SCORES BETWEEN DA AND NON-DA

To verify the null hypothesis, the data obtained from reading scores of SAT between DA and Non-DA were subjected to a non-parametric test i.e., the independent T-test. The SPSS output for the independent T-test appears in Tables 2 & 3.

TABLE 2. Independent T-test outputs (DAGPO and non-DAGPO) group statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Result	DAGPO	31	28.16	5.780	1.038
	Non DAGPO	30	10.10	2.928	.535

TABLE 3. Independent samples test

	F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances not assumed			15.468	44.768	.000	18.061	1.168	15.709	20.413

There was a significant difference in scores for DA group post-test and Non-DA group post-test (T = 15.468 and Sig = 0.000), and the magnitude of the differences in the means was very small (eta squared = .000 < 02). Accordingly, the first null hypothesis was rejected.

TABLE 4. Tests of Between-subjects effects

Dependent Variable: Group							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	
Corrected Model	223.000a	23	9.000	18.012	.000	.000	
Intercept	537.000	1	537.000	993.000	.000	.000	
Result	223.000	23	9.000	18.012	.000	.000	
Error	20.000	37	.000				
Total	1204.000	61					
Corrected Total	243.000	60					

a. R Squared = ,918 (Adjusted R Squared = ,867)

THE NULL HYPOTHESIS: MEDIATION DOES NOT INFLUENCE
THE EFFECTIVENESS OF DA TO IMPROVE CRITICAL
READING

In order to see whether the enrichment program influenced the effectiveness of DA to improve critical reading, one-way ANOVA was used for the analysis of the collected data. The SPSS output for the aforesaid hypothesis is tabulated in Table 5.

TABLE 5. Test of homogeneity of variances one ANOVA
(DAGPR, DAGPO and DAGT) outputs

Result	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7825.828	2	3912.914	163.914	.000
Within Groups	2148.452	90	23.872		
Total	9974.280	92			

Subjects were divided into three groups (Dynamic Assessment pre-test group, Dynamic Assessment post-test group, and Dynamic Assessment transfer group). There was a statistically significant difference at the $P < .05$ level in SAT scores for the aforementioned groups [$F(2, 90) = 163.914, P = 0.000$]. The effect size, calculated using eta squared, was very small $.000 < .02$. It might be due to the power of sample size and that with a larger sample size the effect may be different.

The result showed that the independent variable has significantly affected the dependent variable. Thus, the null hypothesis was rejected.

THE NULL HYPOTHESIS: THERE IS NO POSITIVE
CORRELATION BETWEEN POST-INTERVENTION DA GROUP
SCORES AND TRANSFER ASSESSMENT SCORES.

To verify the null hypothesis, the data obtained from post intervention scores of SAT between DA and transfer assessment scores were subjected to the Pearson product-moment Correlation. The SPSS output for the Pearson Correlation appears in Table 7.

TABLE 7. Pearson Correlation (DAGPO and DAGT)

		2. DAGPO	3. DAGT
2. DAGPO	Pearson Correlation	1	.788**
	Sig. (1-tailed)		.000
	N	31	31
3. DAGT	Pearson Correlation	.788**	1
	Sig. (1-tailed)	.000	
	N	31	31

** Correlation is significant at the 0.01 level (1-tailed).

Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a strong, positive correlation between the two variables [$r = 0.788, n = 31, P < 0.05$]. Additionally, due to having a high level of correlation coefficient (0.75), we can use it for an individual prediction.

DISCUSSION AND CONCLUSION

The present study aimed at investigating the effect of DA on fostering Iranian EFL students' critical reading utilizing an interventionist approach. The study specifically attempted to investigate whether subjects with actual level of development, i.e., pretest, showed similar ZPD in the future development, i.e., posttest and far transfer assessment via enrichment program and mediation, and whether posttest and far transfer assessment can predict the subjects' future development. Hence, the mediation program was aimed at promoting the development of the EFL students' cognition regarding their critical reading sub skills: finding the main idea, inference, figuring out the meaning of bombastic words, collocations, logomachies, paying attention to the second meaning of words, thinking logically about the relations among words and sentences, and making an educated guess through a context clue.

The findings of this study are in line with the results of previous studies in the literature for example Kozulin

TABLE 6. Tests of between-subjects effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4852.000a	14	346.000	34.000	.000	.000
Intercept	93745.000	1	93745.000	9319.000	.000	.000
Result	4852.000	14	346.000	34.000	.000	.000
Error	462.000	46	10.059			
Total	173919.000	61				
Corrected Total	5314.000	60				

a. R Squared = .913 (Adjusted R Squared = .886)

and Grab (2002), pishghadam (2011), Navarro and Mora (2012). Despite the fact that the aforementioned studies have already been done regarding reading skills, they have just paid attention to the reading skills not the effect of DA on critical reading. On the other hand, the researchers could not find any research regarding DA and critical reading since February 2016. In addition, the results of this study indicated that the subjects' performance improved significantly on the DA posttest and far transfer assessment tests. Although DA is still at the dawn of language assessment, some implications can be drawn from the current study.

The implication tackles schools and organizations in general, and the ILI and SANJESH in particular. The Iran Language Institute (aka ILI) as a state owned non-profitable institution, that has a nationwide responsibility to instruct English, may need to consider modify its testing system. The SANJESH organization which is in charge of developing widely used tests like TOLEMO and MSRT can benefit from this research project. Further research can be conducted with more participants in other contexts. Moreover, the researcher utilized only males in the present study. It is desirable that other researchers do similar study either on females or the amalgamation of both genders. It is worth pointing out that the early draft of the present study included both genders, but owing to lack of facility he left out the following research question: Is there a relationship between gender and critical reading via dynamic assessment?

The researchers excluded the following research question because of lack of time in preparing a questionnaire: Do knower-learner interactions during dynamic assessment actually promote Iranian EFL learners' critical reading?

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