

**Graduated Prompts in Dynamic Assessment:
The Impacts on the Iranian EFL Students' Reading Comprehension
Performance**

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Abstract

This study attempted to extend the traditional understanding of the reading assessment in foreign language contexts and to apply Brown's Graduated Prompting (GP) approach of dynamic assessment (DA) to the development of the learners' reading comprehension performance. To this end, a mixed methods approach consisting of a semi-structured interview, a pretest, an intervention program, a posttest and a transfer test was used. The sample for the study included 34 EFL students who were taking a General English (GE) course at Islamic Azad University. In addition, 35 students of similar population were also recruited as the baseline for the comparison of the results. The results of the quantitative and qualitative data analyses as well as the grounded analyses of the data collected during the intervention program applying the Graduated Prompts Moves Protocol (GPMP) – the prompt model devised by the researcher for the current study – suggest that GP is an effective means to not only help EFL learners to improve their reading comprehension performances but also it assists them to move toward self-regulation.

Key words: Reading comprehension, dynamic assessment, ZPD, graduated prompts, transfer

Reading comprehension is a very important skill among other language learning skills, or probably the most important one particularly for university students. As Grabe (2009) points out “success is much harder to come by without being a skilled reader” (p. 5). He further argues that electronic communication only increases the need for effective reading skills and strategies because it engages the readers in coping with the large quantities of information available to them. More importantly, acquiring the ability to read and understand as well as achieving information in English language provides the university students with global access to information and it can be of great help for them to meet their academic demands. Nevertheless, EFL students suffer from a multitude overlooked difficulties in reading comprehension (Karbalaeei, 2010). In order to tackle the students’ reading comprehension problems, diagnostic assessments such as dynamic assessment (DA) in which qualitative reading research examines the process of reading comprehension can be influential. In fact, the unification of assessment and instruction in DA procedures, can be thought of as “diagnostic evaluations in which a mediator offers assistance to learners and analyzes their responsiveness in order to make predictions about their learning ability” (Poehner, 2005, p.21).

DA is an approach that focuses on assessing learning ability to respond to change. More specifically, DA originated almost about half a century ago in response to dissatisfaction with traditional methods of assessment (Gulierrez-Clellen, 2000) in providing the assessors with sufficient information about the learners’ problems. In this regard, Cioffi and Carney (1983) argue that standard assessment procedures are not sufficient for estimating the students’ learning potential. They further emphasize that these assessment tools will not help instructors to identify the conditions under which the students can be assisted to make progress. In fact, measuring the students’ current performance level cannot provide the assessor with enough information about the learners’ potential ability. According to Brown and French (1979), ZPD is used as an indication of the learning potential. Vygotsky (1978) defines ZPD as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86).

The concept of ZPD, then, provides educators with a tool through which the internal course of development can be understood (Vygotsky, 1978, p. 87). Furthermore, Vygotsky emphasizes that using ZPD furnishes us not only with an account of maturation processes (those processes which have already been completed) but also supplies us with the information about the processes that are currently developing. In this regard, Poehner and Lantolf (2005) point out that the concept of ZPD is realized in Dynamic assessment procedures. They note that “any assessment that fails to determine the extent to which the person’s performance is modifiable is incomplete” (p. 235).

In fact, in DA, assessment and instruction are integrated to assist learners to perform beyond their current level of ability (Feuerstein, 2000). In other words, with appropriate mediation (interactive learning experience) through implementing DA procedures, learners can move from their actual level of development toward their potential level of development. Another important notion in DA is the crucial role of mediation and the mediator. As Turuk (2008) points out, by mediation Vygotsky refers to the part played by other intelligible people in the learners’ lives. Mediators, indeed, promote the learners’ learning by choosing and shaping their learning experiences. Turuk (2008) then argues that the individual becomes autonomous through appropriating and internalizing the mediation. Consequently, the ability to recontextualize what they have learned assists them to become self-regulated.

The concept of recontextualization is referred to as *transcendence* (Poehner, 2007) in DA. Transcendence, “bridging between the experience and lessons learned in the current situation and new situations” (Feuerstein, 2000, p.559), refers to the ability of a learner to transfer the lessons learned from one experience to the rules and methods to use in another situation. In fact, DA practitioners are greatly interested in examining whether the learners are able to transfer their acquired abilities beyond a given DA session. For instance, Ferrara and Brown, (1986) studied the relation between current developmental levels of children’s learning through IQ estimation and proximal levels of development by estimating the efficiency of learning and transfer in assisted contexts. They concluded that the assistance children required to do transfer tasks are less stable comparing with the prompts they needed to do the other tasks.

A robust review of literature from L2 perspective leaves us with the overall impression of prevailing merely two general models of DA in L2 context. Poehner, (2005) proposes the terms *interventionist* and *interactionist* to describe the two general kinds of mediation that can make available. However, as Poehner (2005, p. 22) asserts, “DA researchers have generally referred to mediation as intervention”. Lantolf and Poehner (2011) make the contrast between these two models of DA. They argue that these models are different in different ways of responding the learners’ difficulties. If in one model the mediators can freely intervene and follow the learners’ problems providing them with various forms of assistance (e.g. in interactionist model), in the other the mediator has to follow some certain rules (e.g. in graduated prompts model).

In interactionist DA, according to Poehner (2005), the focus is on the learners’ development regardless of the concern for a predetermined endpoint. In contrast, the interventionist DA selects the kinds of problems learners are probably to encounter and mediation is then “scripted as hints, prompts, and leading questions that vary in their degree of explicitness” (Lantolf & Poehner, 2011, p. 15).

In similar vein, Grigorenko (2008, p.118) refers to a different typology of DA application, “the so-called *sandwich /cake* formats”. Poehner (2005) explains that in the *cake* format mediation is only offered when a problem arises during the administration of the assessment. By contrast, the intervention is sandwiched between a statically administered pre-test and posttest in *sandwich* format. In sum, Poehner (2005) believes that this form of providing the learners with mediations seems to be very little different from a traditional static assessment.

In the research literature on the interventionist approaches, different models of DA have been identified. Among them, graduated prompt (GP) has been greatly impressed by Vygotsky’s theory of learning and development as well as his notion of ZPD (Jitendra & Kameenui, 1993). In an attempt to identify the ZPD in GP model, then, the student is provided with a series of prompts that are graduated in explicitness (Campione, Brown, Ferrara, Jones, & Steinberg, 1985). Through the GP procedures the amount and type of mediations required for learner to improve to a higher level of cognitive skills and effective learning are measured (Jitendra & Kameeai, 1993).

DA has been given increasing attention specifically in the L2 field in the last decades (Lantolf and Thorne, 2006). DA researchers report the great impact of DA on the learners’ performances. For instance, Ableeva (2008) studied the effects of DA on the L2 French learners’ listening comprehension. She concluded that applying DA would enable teachers to evaluate the learners’ listening abilities more accurately and would help them to identify the source of the linguistic problems in text comprehension. Many other studies can be found in the literature aimed to examine the effects of DA on the EFL learners’ ability (e.g. Antón 2003; Kozulin &

Garb, 2001; Kozulin & Garb, 2004, Omidire, 2009; Poehner, 2009); however, no study was conducted to explore the effects of GP in L2 reading comprehension domain.

Therefore, given the significance of the reading comprehension ability and the specification of DA procedures in developing language learning, the current study with an attempt to apply GP model of DA was designed to achieve the main goals of pursuing the general objectives of diagnosing the specific sources of the EFL learners' reading comprehension difficulties, assessing the potential level of the EFL learners' reading comprehension, as well as promoting their development. In sum, the current study was incited to address the following research questions:

1. To what extent can offering graduated prompts during the interactions in DA actually promote the Iranian EFL students' reading comprehension performance?
2. Are the participants in the GPG able to transfer the acquired knowledge to the novel assessment context?

Method

Participants

The students participating in the various stages of this study were the undergraduates majoring in diverse fields at Islamic Azad University, Aliabad Katoul Branch. These participants were taking a General English (GE) course. In order to have a base line for the comparison of the effects of the investigated observations, one group of participants was also selected as a control group. Therefore, 69 students recruited from an initial pool of 94 who participated in all procedures of this study. The recruited homogenous participants, then, divided randomly into two groups of experimental (GPG, n=34) and control (CG, n=35).

Instrumentation

In order to be able to answer the research questions two data collection instruments as well as four assessment instruments were used. These instruments provided both quantitative and qualitative data and a rich variety of methodological combinations that were employed to enhance the validity and reliability of the study.

Semi-structured interview. In this study, the interviews were carried out to get insight into Iranian EFL students' understanding about reading and their difficulty in comprehending the passages and to gain a better perception of the type of reading comprehension strategies that they report using when engaged in reading comprehension tests. The students' interviews were scheduled to be carried out after the administration of the pretest and prior to the intervention program. As the interviews were planned to be semi-structured, some fixed questions were asked all the participants based on the interview guide developed prior to the main study procedure. The interview guide is provided in Appendix A.

The Graduated Prompts Moves Protocol (GPMP) for the Intervention Program. The careful analyses of the data collected during the pilot study (the semi-structured interview responses) provided the researchers with informative data for devising a protocol of a series of suitable prompts for the intervention program. In order to examine the explicitness of the prompts, the initial table was tested with the pilot students. The data were then content analyzed

learners' reading comprehension skill was merely required to be examined. Therefore, this section of the test is henceforth referred to as the "reading KET". The reading paper included five parts: (1) matching similar words, (2) identifying appropriate lexical items, (3) matching sentences at local level, (4) understanding a short article, and (5) reading and identifying appropriate structure word. The conducted reading KET included 35 questions and it took approximately 45 minutes for the students to complete the test. The reliability of the reading KET was estimated and presented in Table 3.

2. Reading comprehension tests. Three reading comprehension tests were developed to assess the reading comprehension performance of the learners at different stages in this study. These tests included: A pretest, a posttest, and a transfer test. In order to specify the test construct, an analytic approach suggested by Alderson (2000, p. 15) was used. In this approach, "the test developer seeks to test whether readers successfully engage in those aspects of the process that the tester considers to be important". In other words, the tester seeks to isolate and identify those components or domains of the reading process which are relevant to the purpose for which the tester is testing (pp. 15-16). Accordingly, three specific domains of (a) finding the main idea, (b) guessing the meaning of the new words and (c) inferencing were selected and the test items were developed accordingly. Hence, these tests were developed to examine the participants' performances on only three specific domains of the reading comprehension. Therefore, the reading comprehension pretest was qualitatively different from the reading section of the KET which was conducted to test the participants' general reading comprehension ability.

The passages for the reading tests were adapted from the most appropriate sources available to the researcher. In fact, the sources were suggested by the supervisor. Following Alderson and Urquhart (1985), the Fog index was used to examine the readability of the passages. The ideal score for readability with the Fog index is 7 or 8. Anything above 12 is too hard for most people to read. Therefore, the average Fog index was taken for the pretest and the posttest (i.e. 7-8).

The transfer reading comprehension test was developed to examine how far the learners can extend their knowledge and abilities beyond the assessment context. Drawn on Feuerstein and Brown's transfer assessments who increased the difficulty and complexity in creation of the transfer tasks (Feuerstein, 2000), a higher Fox index was considered for the passages of transfer test. Finally, the selected passages underwent a careful analysis including the length, topic as well as the reliability. Table 2 presents the detailed information about all three reading comprehension tests. The reliability of all the three tests were also estimated and presented in Table 2.

Table 2. Demographic Information about the Reading Comprehension Tests.

Tests	Passage Number	Topic	Number of Items	Number of Words	Gunning Fog Index
Pretest	1	Success	6	264	7.91
	2	Depression	6	240	8.46
	3	Luther King	6	241	8.51
	4	Facial Expression	6	245	8.21
Posttest	1	Stages of Life	6	250	8.56
	2	Exercise	6	251	8.50
	3	Comfort Food	6	260	8.09
	4	Sleep	6	260	8.55
Transfer Test	1	Communication	6	210	11.37
	2	Dream	6	262	10.10
	3	Stress	6	216	12.11
	4	Feminism	6	259	11.58

Note. *The source of the passages: Birjandi and Mosallanejad (2010a, 2010b).

Procedure

The main study procedure took eight weeks. In Week 1, the students were introduced to the course and the program. In order to examine the students' general reading comprehension ability, the reading section of the KET (2005) was administered to all the participants in Week 2. It took about 45 minutes for the students to complete the test.

In order to assess the students' performances on the three designated reading comprehension domains (Finding the main idea, guessing the meaning of the new words, and inferencing) at the outset of the study, the pretest was administered in Week 3 during the students' regular class hours and it took about 35 minutes. Person-to-person semi-structured interviews were then conducted with the experimental group (GPG) in Week 3 and lasted approximately 30 minutes for each learner. In particular, the interviews were carried out to achieve the following purposes: (a) to get insight into the EFL learners' understanding about reading and their difficulty in comprehending the passages, (b) to gain a better perception of the type of the reading comprehension strategies that they report using when engaged in reading comprehension tests, and (c) to build an awareness of the learners' overall view of language learning. It is worth mentioning that all the interactions between the learners' and the researcher were audiotaped for further analyses.

Intervention program. The intervention program started in Week 4. The purpose of this DA program was to assess the potential level of the participants' reading comprehension as well as promoting their development. The GP procedures of DA, as it was explained earlier, provide mediation in the form of the predetermined prompts that are sequenced from the most general to the most specific. The prompts are also provided based on the information generated by an individual, and the number and the types of the prompts in the sequence are presented in a branching sequence. In other words, "if the information produced by the individual is accurate, some or all of the prompts may be skipped" Jitendra and Kameenui (1993, p.10). The number of prompts needed for a test to be done is then regarded as inversely related to the learning or

transfer ability (i.e., the higher the number of the prompts required to solve a problem the less likely it is that transfer will occur).

Drawing on the assumption of GP, the hierarchies of the mediations were then designed in advance of the program. The mediation taxonomy (the GPMP, presented in Table 1) was generated a priori and then applied during the intervention sessions. The procedures were administered in an individualized setting. The program included three intervention sessions. Since in each session, one specific domain of the reading comprehension was worked out, the sessions can be referred to as the main idea, guessing and inferencing sessions respectively. At each session, the students were presented with a series of four passages (the pretest) following 6 reading comprehension questions each. The students were asked to read the passages and then answer the questions. The same material was used for all the participants. A brief report of a typical intervention session (Session 1) is provided as follows.

Session 1: In this session (main idea session), the participant was presented with the main idea questions (MQs) of the test and asked to answer Question 1. The student was told that the hints were given if needed but she or he should try to answer the test items with as little help as possible. The students were also asked to think out aloud while working. She or he then attempted to answer the question. If after a few minutes he or she appeared to be making little or no progress, the researcher began to deliver the prompts one by one in a pre-specified sequence of increasing explicitness (according to GPMP). The two initial prompts (Prompt 1: Find the topic of the passage or the most frequent word and Prompt 2: Find the main idea of the first paragraph) were the general ones that were aimed to redefine the purpose of the item. The next prompt (Prompt 3: Check whether the idea is supported by the whole paragraph not just one paragraph) was more specific. If the learner did not understand a certain prompt, it was paraphrased. However, if the student prompted himself or herself, the corresponding prompt was skipped.

Finally, for a certain test item (for instance, item 1 in Session 1 in the program), prompting would stop once the student could find the correct answer. Once the student could not answer the question, the last Prompt (Prompt 4, for Question 1) would be provided along with the complete explanation. After that the student was asked to read Passage 2 and answer Question 7. The same procedure would follow for this passage. Therefore, each intervention session would end when the student answered a total of the items (for Session 1, main idea items). Session 1 took approximately 45 minutes for each student. There was a week interval between each session.

In Week 5 (the second session of the program), a different domain of the reading comprehension was worked, that is, guessing the meaning of the new words. The student was presented with the same test and asked to read the questions which asked about the word meanings. Similar to Session 1, the student was provided with the graduated prompts (according to the GPMP) each time he or she was not able to answer the question. The second session of the program was also terminated once the student answered all the items of the guessing session. This session lasted about 45-60 minutes approximately for each learner.

In Week 6 (the third intervention session), the intervention was focused on the inferencing questions which found to be a more demanding domain of the reading comprehension. This session took longer than Session 1 and 2 since there were more questions for the students to answer and the items were also more challenging, approximately 60-70 minutes. In order to develop the suitable prompts for the IQs, the items were divided into two groups: Those items in which there is a key word in the question (For instance, the key word **severe case** in Question

10: Which item is not true about **sever cases** of depression?) and the items in which no key word is given (For example, Question 11: What can be inferred from Paragraph 3?).

In Week 7, the posttest was administered during the students' regular classroom hours. Similar to the pretest, the posttest also took approximately 35 minutes. The administration of the transfer test began in Week 8. Unlike to the pretest and posttest, the transfer test was conducted in individualized session formats. It took about 35-45 minutes for each student to do the test. The researcher intervened at times to ask questions about the strategies the students applied to answer the test items. However, for the psychometric considerations of the static tests, the students were not allowed to ask questions to answer the test items. The students' test papers (the pretest, the posttest, and the transfer test) were then scored and entered SPSS 18 for quantitative statistical analyses.

Results

Qualitative data analysis was conducted based on the procedures for the qualitative content analysis proposed by Dorenyei (2007), and Ellis and Barkhuizen (2005) for the data collected during the pilot and main study for developing the GPMP. The analytical sequence in the present study followed the stages of transcribing the spoken data, translating the collected data into English, pre-coding and coding, growing ideas and looking for the patterns, and interpreting the data. For the sake of brevity, the pilot study data analyses were deleted.

Firstly, a pilot test was conducted to estimate the reliability of all four assessment instruments used in this study. The results are presented in Table 3.

Table3. Reliability Index of the Reading KET, Pretest, Posttest, and Transfer Test

Tests	Cronbach's Alpha	k
Reading KET	.86	35
Pretest	.70	24
Posttest	.72	24
Transfer Test	.71	24

As Table 3 shows, all the assessment instruments in this study, that is, the reading KET, the pretest, the posttest, and the transfer test enjoy acceptable reliability estimate of .86, .70, .72, .71 respectively.

Data Normality. It should be noted that prior to any statistical analysis, the appropriateness of the parametric tests, that is, the normality of the data, was examined. As Table 4 shows, the Shapiro-Wilk of .353 and .368 for the GPG and the CG respectively indicated that the assumption of the homogeneity of the data has been met (Field, 2005, p. 527).

Table4. Test of Normality

Group	Df	Skewness	Kurtosis	Shapiro-Wilk
GPG	34	.76	.40	.353
CG	35	.41	.30	.368

In order to ensure that the students' performance improvement in the posttest was the effect of the intervention not the test variance, the pretest and posttest were examined applying parallel forms reliability (Bachman, 1990). To this end, both revised tests (pretest and posttest) were administered to 30 pilot students. The results are shown in Table 5.

Table 5. Descriptive Statistics for Parallel Tests

Test	Df	Mean	SD	Std. Error
Pretest	30	8.90	2.75	.52
Posttest	30	9.90	3.90	.50

The results of the paired-samples t-test (presented in Table 6) indicated that there was not any significant difference between the pilot group's mean scores in the pretest and posttest ($t(29) = 2, P = .054 > .05$). Based on these results it can be concluded that the reading comprehension pretest and posttest were parallel.

Table 6. Paired Sample t-test for Parallel Forms

Pair	Paired Differences						
	Mean	SD	Std. Error Mean	t	df	Sig. (Two-tailed)	
Pretest and Posttest (Pilot)	1.00	2.72	.49	2.007	29	.054	

In order to achieve the objectives of the present study and answer the research questions, three reading comprehension tests (the pretest, the posttest and the transfer test) and a reading section of the KET were administered with both the GPG and the CG. The initial tests (The reading section of the KET and the pretest) were aimed to examine the degree of the homogeneity of the sample population at the outset of the study. In fact, these tests were conducted to investigate whether the participants were homogenous in terms of their performance in general and, in particular, in specific domains of the reading comprehension. Descriptive statistics for all the tests administered in the current study are shown in Table 7.

Table 7. Descriptive Statistics for the Reading KET, Pretest, Posttest, and Transfer Test

	GPG (N=34)				CG (n=35)			
	Mean	SD	Statistic	Std.Error	Mean	SD	Statistic	Std.Error
KET	17.2941	4.96978	.336	.403	18.2000	5.405588	.129	.398
Pretest	8.4118	3.333137	.760	.403	8.0000	3.0000	.416	.398
Posttest	13.2648	2.79945	-.007	.403	8.1143	2.93830	.486	.398
Transfer Test	14.5882	2.96566	.287	.403	7.286	2.89508	1.212	.398

The normality of the distribution was also estimated. Therefore, the statistic of skewness was divided by the standard error of both the GPG and the CG. The results were .83 (.336 / .403) and 0.32 (.129/.398) for the reading KET in the GPG and the CG respectively. The same calculation was conducted for the pretest. The results were 0.00 (.760/.403) and 1.04 (.416/.398) for the pretest in the GPG and CG respectively. All values fell within the range of +1.96 and -1.96. Therefore, the normality of distribution within each group for both the reading KET and the pretest were confirmed.

Table 8 presents the results of running a t-test for all four tests administered in this study. As it is evident in Table 8, $F(1, 67) = 1.08, p = .30$ and $F(1, 67) = .673, p = .41$ for the reading KET and the pretest respectively, the variances between the two groups (GPG and CG) are significantly different in both the reading KET and the pretest. Therefore, the results of the t-test with the assumption of the homogeneity of the variances are reported here. Examining the mean differences of .90 for the reading KET and .91 for the pretest with $t(67) = .724, p = .47$ (two-tailed) and $t(67) = .54, p = .59$ for the reading KET and pretest respectively revealed that differences between the two groups were not significant. Therefore, the probable differences between the groups at the end of the intervention program could be attributed to the effects of the program.

In order to examine the impact of GP in the learners' reading comprehension performances and in order to answer the research questions, the post test and the transfer test were conducted. The descriptive results of the posttest and the transfer test are also presented in Table 7. As Table 7 indicates, the mean of the GPG ($M = 13.2648, SD = 2.79945$) in the posttest and in turn in the transfer test ($M = 14.5882, SD = 2.96566$) are exponentially higher than those of the CG ($M = 8.1143, SD = 2.93830, M = 7.286, SD = 2.89508$ for the posttest and the transfer test respectively). However, further statistical analysis was required to examine the significance difference between the group performances.

As it is evident in Table 8, $F(1, 67) = .027, p = .86$, disconfirms the equality of the variances; nevertheless, $t(67) = 7.45, p = .00$ (two-tailed) lead to the conclusion that there was a significant difference between the mean scores of the two groups in the posttest. Moreover, the results of conducting the transfer test which are also presented in Table 8 with $F(1, 67) = .70, p = .40$ disconfirms the equality of the variances; however, $t(67) = 10.71, p = .00$ (two-tailed) lead to the conclusion that there was a significant difference between the mean scores of the two groups of (the GPG and the CG) in the transfer test.

Table 8. Independent Sample t-test for the GP and CG in the KET, Pretest, Posttest and Transfer Test

	Levene's Test of Variances		t	Sig. (2-tailed)	df	Mean Differences
	F	Sig.				
Equal Variances Assumed KET	1.088	.301	.724	.472	67	.90588
Pretest	.673	.415	.540	.591	67	.91176
Posttest	.027	.869	7.451	.000	67	5.15042
Transfer test	.702	.405	10.715	.000	67	7.55966

Finally, a paired samples t-test was used to compare the means of the posttest and the transfer test for the within-groups design. The results are presented in Table 9.

Table 9. Paired Sample t-test for Posttest and Transfer Test

Pair	Paired Differences	Mean	SD	Std. Error Mean	t	df	Sig. (Two-tailed)
		Posttest Transfer Test	GPG 1.32353	1.85408	.31797	4.162	33
Posttest Transfer Test	CG -1.085571	1.77186	.29950	-3.625	34	.001	

AS it is evident in Table 9, $t(33) = 4.16$, $p = .00$ (two tailed) there was a significant difference between the mean scores of the two tests for the GPG. The results for the CG are also presented in Table 8. Therefore, as the results indicate, it can be concluded that the CG scores did not improve in the pretest.

Discussion

Following the graduated prompts methodology that prescribes mediation in tasks other than the tests, the learners were involved during the intervention program in a learning activity oriented towards their ZPD in this study. In other words, the meditational activities in this study resulted in the learners' improved performances which were realized in the posttest and the transfer test results. Transfer test was embodied in this study to determine how far the learners could extend their knowledge and abilities beyond the assessment context, and how much assistance they required to do the test. In fact, this study included four stages: The pretest, the intervention program, the post-test and the transfer test. All three assessment stages were non-dynamic. Therefore, the exploration of the reading development was addressed through quantitative statistical analyses.

To reiterate, the current study was aimed to address the following research questions:

1. To what extent can offering graduated prompts during the interactions in DA actually promote the Iranian EFL students' reading comprehension performance?
2. Are the participants in the GPG able to transfer the acquired knowledge to the novel assessment context?

By recapitulating the numerical statistical results to answer the first research question, we could simply notice the dramatic rise in the mean scores of the GPG in the post evaluations. Some learners' instantaneous progress in using strategies in doing reading comprehension tests was observed even after receiving only one single hint or prompt by the researcher. Indeed, what we need to bear in mind is that the present study involved the university students from a population of EFL learners with very little or no such experience. Indeed, they had not been presented with the strategies for reading texts before the program, or they had never gained any experiences on "self-regulation" activities. The notion of receiving hints was thus a novelty to them and hence resulted in their abrupt dramatic improvement in the posttest. The poor performance of the CG is the other evidence for the impacts of the intervention program and the

effects of the mediations the learners provided with during the program in the GPG's outperformances in the posttest as well as the transfer test.

The significance of the second question is that it attempts to explore one of the fundamental issues in DA, that is, "transcendence" (Feuerstein, 2000, p.558). DA researchers such as Brown and Ferrara (1985) have included transcendence as part of their procedures tasks that differ from those originally encountered by the learners in order to understand the extent to which the learners have developed. The transcendence notion of DA was addressed in the present study through the results of the transfer test. Considerable changes in the learners' performances emerged during the transfer test session. In addition to the significant outperformance of the GPG over the CG in the transfer test represented in Table 6, the improvement in the learners' ability to use the strategies acquired during the intervention program was explicitly observed by the researcher while administering the test in one-on-one sessions by means of asking probing questions.

Some other results of this study are further reported:

- 1) This study, in line with most DA based studies (e.g. Ableeva, 2008; Anton, 2009; Omidire, 2010; Poehner, 2005) confirmed the diagnostic potency of DA when studying the source of the problems experienced by the learners during the assessment procedure. The specific difficulties of the learners in the current study (e.g. inadequate vocabulary knowledge, lack of strategy awareness or applying inappropriate strategies, getting confused facing with new words) provided the L2 reading teachers with the deeper insight into the learners' difficulties in advance of the any reading programs. In addition, keeping in line with Alderson (2000), this indicates the urgent need for designing the L2 diagnostic tests in reading comprehension.
- 2) The mediations during the intervention program in this study revealed that vocabulary knowledge is not the key factor in doing the reading comprehension tests. Although, majority of the students during the semi-structured interview referred to vocabulary as the most hindering factor in the text comprehension (84.6% of the students believed that words meaning is the most important problem for them in English text comprehension and 12% mentioned that they got confused in case of encountering new words in the passages), they could perform singularly skillfully in doing tests after the program.

In sum, the findings of this study made significant contribution to a better understanding of the ZPD. The learners' decreasing dependence on the mediator to provide them with prompts to answer the questions uncovers the process of transformation of a potential ZPD into the zone of actual development and in turn an orientation toward self-regulation.

Limitation of the study as the insight for further research

In addition to the analyses described above regarding the effectiveness of the GP procedures, other potential insights were not reported in this paper. Chief among these is the learners' gender. The participants' gender was within the confine of the sociocultural factors of the area in which the study was conducted. Therefore, among the subjects in GPG, only one of the participants in the experimental group was male. Therefore, the study might come up with different results if more male subjects participate in the study.

Conclusion and Implications

In this study, DA was represented within the context of a pedagogical task, rather than during the administration of a formal test. This has direct implications for the classroom assessments. The

significance for the classroom assessment is the inclusion of the mediation in DA procedures. Mediation is indeed a key concept in the realization of the zone of proximal development. In other words, the representation of the learners' ZPD (their actual and potential development), along with the distance in-between, is truly based on the learners' participation during the mediation stage. The decreasing number of the prompts needed for the learners to do the task or answer the reading comprehension questions, indicated the learners' improvement toward autonomy. Vygotsky (1978) refers to this as the learner's self-regulation. In fact, implementing dynamic assessment procedures not only helps to uncover the participants' ZPD, but also reveals the extent of the students' current strengths and weaknesses with reading comprehension domain of language learning.

More importantly, mediated learning activities are exactly what should occur in schools and universities. There is some evidence that teachers give less attention to this learning mode. As it is simply observed in most university classes, good readers are constantly questioned in classes. Therefore, following continual practices which good readers are assigned, they are assisted to internalize the language. More illuminating is growing the evidence that poor readers themselves agree to reduce learning demands to minimum (Ferrara, Brown, & Campione, 1986). Therefore, this is the role of the teacher to act as an experienced mediator and delve into the learners' ZPD to unveil the learners' hidden potentials. This was what exactly observed in the current study.

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