The Washback Effect of Dynamic Assessment on Grammar Learning of Iranian EFL Learners

Mohammad Ahmadi Safa, Bu Ali Sina University, ahmadisafa@gmail.com

Farhad Jafari, Bu Ali Sina University, farhadjafar@yahoo.com

The JLTL is freely available online at www.jltl.org, with neither subscription nor membership required.

Contributors are invited to review the Submission page and manuscript templates at www.jltl.org/Submitonline

As an online journal, the JLTL adopts a green-policy journal. Please print out and copy responsibly.

The Washback Effect of Dynamic Assessment on Grammar Learning of Iranian EFL Learners

Mohammad Ahmadi Safa [1], Farhad Jafari [2]

ABSTRACT

Dynamic assessment (DA) is believed to have potentiality to affect EFL learners' language development; however, its different forms might be of varying types and size of washback effects on foreign language development. So far, it seems few studies have compared the effects of interactionist and interventionist models of DA on the grammar learning of EFL learners; moreover, whether DA procedures have different impacts on the learners in the contexts of official high schools and private language institutes has received scant attention. Against this backdrop, 96 intermediate EFL learners from a high school and a language institute were put into experimental groups of A and B and a single control group (C). During 12 treatment sessions, group A participants were taught and assessed through interactionist DA procedures, group B received interventionist DA practice and group C was assessed through conventional multiple choice assessment procedure. The results showed that both interactionist and interventionist DA practices had significant effects on grammar learning of EFL learners. However, interactionist DA was more effective in language institutes with limited number of learners while interventionist approach was of higher impacts in high schools with larger groups of learners. The findings imply that the validity of different DA forms is sensitive to the practicality of the procedure in the assessment context.

Dynamic assessment (DA) is an alternative new approach in language testing and assessment and is basically built upon Vygotskian socio-cultural theory and Zone of Proximal Development (ZPD) as a salient concept of this theory. DA concentrates on learner's errors and the application of different forms of mediations to develop the learner's knowledge or skill. Sternberg and Grigorenko (2002, cited in Poehner and Lantolf, 2005, p.2) define dynamic assessment as a procedure in which the assessor "takes into account the result of intervention and teaches the examinee how to perform better on individual items or on the test as a whole." Williams and Burden (1997, p,42) believe that dynamic assessment is a process in which "assessment and learning are seen as inextricably linked and not separate processes" and the criterion concepts of test validity and reliability that are of vital importance for the so-called static tests need to be redefined to fit the scope of DA.

---

[1] Bu Ali Sina University, ahmadisafa@gmail.com, +98 0918 313 2987
[2] Bu Ali Sina University, farhadjafar@yahoo.com, +98 0918 912 6496

Proponents of DA prefer this procedure to the static assessment modes on the grounds that while static assessment leads teachers to focus only on the content which will be included in the final tests in a course of instruction (Shepard, 2000; Gipps, 1994) , DA modes are both summative and formative in nature and provide a diagnostic understanding of learners' problems through mediating hints and prompts during assessment process and helping learners to solve their problems (Lantolf & Poehner, 2008).

To briefly illuminate both theoretical and practical aspects of DA, the following theoretical framework section tersely deals with the sociocultural foundations, the predominant models of DA and some of the eminent and recent empirical studies on the application of DA for the development of different language skills in versatile educational settings. The literature review partially leads to the identification of the gap addressed in the present study and is finally ended up with the statement of the research questions.

2. Theoretical Framework

Dynamic Assessment in its origin may not seem to be a very recent idea in educational and psychological assessment (Haywood & Lidz, 2007) as it is stated long ago in Vygotsky's Socio-Cultural Theory (SCT) of mind (1987) that through appropriate mediation, learners can promote their present performance and their later development (Vygotsky, 1986, 1998). As is implicitly reflected in Vygotsky's postulation and maintained by Poehner (2007), the true function of assessment in DA is quite different from this concept in psychometric testing. Assessment in DA means transferring knowledge through collaboration between teacher or mediator and learners. In a DA based assessment session learners gradually become engaged in more complex learning experiences with continually lesser mediation from assessor or teacher. In this way the current abilities and knowledge level of learner is identified through dynamic assessment modes and the mediator helps learners learn from interaction with the teacher or experienced peer and the identified knowledge or skill level is to be promoted (Poehner, 2008).

Few different models like interactionist and interventionist models are proposed for DA, however, what makes these models similar is their dependence on test-instruction-test paradigm and what differentiates them is the type of instruction administered between pre and posttests (Kozulin & Garb, 2001). The terms interactionist and interventionist DA as the two main models of DA were first proposed by Lantolf and Poehner (2004) for two general kinds of mediation. Interventionist DA is similar to static assessments and to the psychometric procedures in testing in that a standardized administration procedure is applied to produce easily assessable end results. However, it is different from static psychometric procedures in that it provides instantaneous mediation to the learners' developmental problems and difficulties, while standardized static assessment procedures do not provide mediations as they are not primarily developmental in nature. Contrarily, in interactionist DA model, there is no predetermined end point as the mediator helps the learners through interaction with him and the focus is on the development of the individual or even a group of learners (G-DA) (Lantolf & Poehner, 2004). Interactionist DA follows Vygotsky's preference for cooperative dialogue and is rooted in qualitative interpretation of ZPD, qualitative assessment of psychological processes and dynamics of their development (Minick, 1987) while interventionist DA has a strong tendency towards quantification and psychometric analysis.

During the last two or three decades many researchers have investigated the effects of DA on the development of different language skills. Naeini and Duvall (2012), as an instance, investigated the impact of dynamic assessment on reading comprehension of Iranian university students. They focused on the effect of DA on reading comprehension of 10 university students and claimed for a significant improvement of reading comprehension of the participants as a result of their DA based assessment.

Likewise, Pishgadam, Barabadi and Kamrood (2011) investigated the effectiveness of using a computerized dynamic reading comprehension test on Iranian intermediate EFL learners' reading comprehension. The results demonstrated that mediation in the form of hints and prompts significantly increased the learners' scores and their reading comprehension level. Ajideh and Nourdad (2012) also put the magnifier on the effect of DA on individual differences in reading comprehension ability of EFL learners. Their results verified the priority of dynamic assessment over non-dynamic assessment procedures for deeper description of actual and potential abilities of learners in reading skill too.

Poehner (2005) studied the impact of DA on oral proficiency of French undergraduate learners. He asked six advanced undergraduate learners of French as L2 to orally construct a series of narratives. The first narrative was created by the learner but the second with the help of the examiner. This enrichment program lasted for six weeks. The results of the study indicated that DA was an effective means for understanding learner's abilities. Focusing on oral proficiency and speaking skill, Anton (2009) applied DA with third year language majors in a university context. After answering a non-dynamic entry exam, the learners participated in a mediated learning experience focusing on the written and spoken parts of the test. Considering learner's responses to mediation during dynamic speaking test, Anton could reach a better comprehension of learners' actual and emergent abilities.

Dynamic assessment has also been applied in the field of inter-language pragmatic development. Khatib and Ahmadi Safa (2011) explored the impact of ZPD-wise and non-ZPD based dynamic assessment of the learners' abilities in the realm of inter-language pragmatic competence and underscored the higher efficiency of the ZPD-wise mediation and dynamic assessment over the Non-DA procedure for the development of the speech acts of apology, complaint and request. Tajeddin and Tayebipour (2012) also studied the effects of dynamic assessment on EFL learners' acquisition of request and apology. For the purpose of their study, 40 university students with two different levels of proficiency were selected and divided into DA and Non-DA groups. Both groups were taught how to use appropriate request and apology strategies in English classes. DA group received mediation and feedback during the study while Non-DA group received no mediation. The findings of the study revealed that DA group was better than Non-DA and both groups proficiency level developed from pre-test to post-test.

Concerning the effect of DA on the grammar knowledge development of EFL learners, Jafary, Nordin and Mohajeri (2012) explored the comparative impact of dynamic and static assessment on grammar knowledge growth of Iranian EFL learners. In their study 70 pre-university students were divided into experimental and control groups. The experimental group received DA based mediation while the control group received deductive instruction of grammatical rules with no dynamic assessment of the learners learning rate. The results verified the significant impact of the DA on grammar knowledge improvement of the EFL learners. Sadeghi, and Khanahmadi (2011) had also conducted a study similar in design and objectives to that of Jafary, et.al (2012), on the grammar learning of Iranian EFL learners and verified the significant superiority of DA based mediations to the static grammar test.

Alavi, Kaivanpanah and Shabani (2012) investigated the applicability of group dynamic assessment (G-DA) with a group of L2 learners and tried to assess the participants' listening comprehension growth. A micro genetic, longitudinal and interactionist method was applied with a group of 15 L2 learners ranging from 20 to 25 years. The analysis of data revealed how collective mediation could help learners improve their listening comprehension. More recently, Hidri (2014) examined the effects of dynamic assessment on the listening comprehension of 60 university EFL learners. The results revealed that:

- The assessor's behavior changed depending on the rater's view of language and language learning.

- The test-taker's performance varied significantly in both test modes, (static and dynamic assessment) with more able student in dynamic than in static test. This may be related to the accessibility of test items, the lenient scoring behavior and joint interactions.

Some other studies (e.g. Ahmadi Safa & Hamzavi, 2013; Cotrus & Stanciu, 2014; Sadeghi & Khanahmadi, 2011; Yildrim, 2008; Zoghi & Malmeer, 2011) investigated the effects of DA on the foreign language learners' development from different vantage points and concluded that dynamic assessment significantly improves the L2 learners' language skills. However, while it seems sufficient number of studies have focused on DA and its impact on various aspects of second or foreign language development and have mainly underscored the superiority of dynamic over non-dynamic assessment procedures, the brief outlined review of literature reveals the scarcity of studies focusing on the DA procedures in themselves comparing different modes of dynamic assessment with each other. It seems no comparative study has juxtaposed the interactionist and interventionist DA approaches to study and illuminate the distinctive effects that each one may have on the EFL learners' language knowledge or skills development. Moreover, the literature was found quite insensitive to the differential impacts of DA procedures in versatile instructional or educational contexts like mainstream official contexts and nonofficial institutional contexts. Against this backdrop, this study was a partial attempt to address the lacuna, and on the one hand it compared the two modes of DA in their effects on the grammar learning of Iranian EFL learners, and on the other, the two modes of DA were compared with the static conventional assessment modes in their effects on the grammar leaning of Iranian EFL learners. The study set out to answer the following research questions:

1. Is there any significant difference between the effects of interactionist and interventionist DA models and the static conventional assessment on the Iranian high school EFL learners' grammar learning?

2. Is there any significant difference between the effects of interactionist and interventionist DA models and the static conventional assessment on the Iranian EFL learners' grammar learning in language institutes?

3. Is there any significant difference among the effects of interactionist DA, interventionist DA, and conventional static grammar assessment procedures on the grammar learning of the Iranian EFL learners' of mainstream high schools and private language institutes?

3. Method

3.1. Design of the Study

The study applied a quasi-experimental 3×2 factorial design. There were two independent variables. The first one, i.e. assessment procedure had three levels of interactionist, interventionist, and conventional grammar assessment, and the moderator variable was the context of learning with two levels of mainstream high school and private language institutes. The only dependent variable was the grammar learning or development level of the participants. Moreover, as the random selection of participants was not feasible due to practical limitations of the study, convenience sampling procedure was applied.

3.2. Participants

The participants of this study were selected from *Shahid Soleimani* high school and *Sina* private language institute both located in *Borujerd* (Lorestan province, Iran). The total number of participants was 142, 67 from the high school and 75 from the language institute. Three groups of students in the high school and three groups of EFL learners in the language institute were selected through convenience sampling procedure. The participants in high school were taking pre-university courses and language institute participants were at pre-intermediate proficiency level. The participants in each site were so selected to be approximately at the same level of English proficiency. For this purpose, in language institute a Preliminary English Test (PET) and for high school participants a researcher made test including items selected from the Universities Entrance Examination pool of items developed by Sanjesh Organization were run to obtain measures of their general English proficiency. As a result, 51 high school students and 45 pre intermediate EFL learners of the language institute were identified and selected as the participants of the study. The identified participants' age ranged from17 to 19. It is worthwhile to note that the typical assessment mode in Iranian mainstream general educational contexts including high schools is predominantly the traditional assessment mode relying mainly on multiple choice discrete testing of different language components and skills while the assessment modes in institutional semiofficial contexts primarily include alternative performance based assessment procedures like interviews, role plays, and task based assessment practices in addition to traditional modes of assessment.

3.3. Instrumentation

In order to gather the required data, the following instruments were used:

Proficiency Test: To assure the homogeneity of high school students' English proficiency, a researcher made test comprising of 30 grammar and vocabulary items selected from test books published by National Organization for Educational Testing was used. Considering the validity of the instrument, the test content and format was subject to the judgment of both teachers and practitioners who had taught the intended level courses at high school and two Teaching English as a Foreign Language (TEFL) experts. Moreover, reliability analysis of the test verified the instrument as acceptably reliable (α= 0.75). Also, in order to assure homogeneity of participants in the private language institute in terms of their L2 proficiency at the outset of the study, a Cambridge English: Preliminary English Test (PET, 2007), as an internationally renowned and reliable test was administered as the participants were deemed to be at pre- intermediate level of general English proficiency. These two different proficiency tests were distinctively applied in the high schools and language institutions on the grounds that the operational definition of foreign language ability is inconsistently different in the two contexts. While the vocabulary and grammar knowledge are generally deemed as the most relevant and needed elements of foreign language ability in Iranian high school contexts, the institutional language learning contexts require and target communicative language abilities and a proportionate attention is paid to all language components and skills in such contexts. Therefore different proficiency tests were needed to be applied for the two educational contexts.

Pre and Posttest: A multiple choice static grammar test taken from Barron's TOEFL (1996, sixth edition) was given to the participants of all groups as the pretest and posttest of the study. In addition, for participants of *Sina* language institute six grammar quizzes of the intended and taught grammar points were extracted from the test book of Top Notch Series (2a) (Saslow & Ascher, 2012). The six quizzes of the grammar points for the high school participants were extracted from the test books developed by Iranian Sanjesh Organization.

3.4. Data Collection Procedure

At first, a total of 142 EFL learners from high school (N=67) and language institute (N=75) were chosen. The participants in high school were at pre university level and the language institute participants were taking the so called pre-intermediate level course. The language institute participants were selected from a pool of EFL learners who had enrolled for the course and their selection was based on the results of the PET test. Based on the test results, 45 participants who scored between one standard deviation above and below the mean and their informed consent was obtained were recognized as relatively homogenous pre-intermediate EFL participants. Randomly assigned into three groups, their PET test results were further compared to assure the homogeneity of the sample. The descriptive results are summarized in Table 1.

Table 1
Descriptive statistics of PET test for language institute participants

Class	N	Mean	SD	Std. Error	95%confidence interval for Mean	
					Lower Bound	Upper Bound
A	15	79.63	2.29	.592	78.36	80.90
B	15	80.06	2.19	.566	78.85	81.28
C	15	80.06	2.47	.637	78.69	81.43
Total	45	79.92	2.27	.339	79.23	80.60

A short glance at Table 1 makes it clear that the mean scores of three groups were quite similar and there was no apparently grave difference in their PET scores. However, to make sure no statistically significant differences existed among groups' mean scores, a One-Way ANOVA analysis was run on the data. The ANOVA results are shown in Table 2.

Table 2
ANOVA analysis of PET test results

Score	Sum of scores	d f	Mean square	F	Sig
Between groups	1.87	2	.93	.174	.84
Within groups	226.60	42	5.39		
Total	228.47	44			

As Table 2 presents, there was no significant difference among the participants' English proficiency levels ($F_{(2, 42)}$ =. 174, P=0.84 > 0.05). Accordingly the participants in all three groups in language institute were assumed to be of nearly the same level of English general proficiency and the differences among mean scores of the groups were not found to be significant.

Also for high school students, a general English proficiency test including items selected from the University Entrance Examination pool of items developed by Iranian Sanjesh Organization was given to 67 conveniently sampled high school learners organized in three classes to assess their general English proficiency and assure the homogeneity of the sample. The descriptive results of the test are summarized below in Table 3.

Table 3
Descriptive statistics of homogeneity test of high school participants

Class	N	Mean	SD	Std. Error	95%Confidence interval mean	
					Lower Bound	Upper Bound
A	20	12.40	1.52	.34	11.68	13.11
B	22	12.50	1.61	.34	11.78	13.21
C	25	12.26	1.85	.37	11.49	13.02

Total	67	12.38	1.66	.20	11.97	12.78

As is presented in Table 3, the mean scores of the three groups were quite similar and it seemed that the minor differences among them were not significant; however, to further test the significance of the differences among the groups, a One-Way ANOVA was run on the data (Table 4).

Table 4
ANOVA analysis of high school participants' grammar test

Source	Sum of squares	df	Mean square	F	Sig
Between groups	.66	2	.34	.12	.88
Within groups	181.86	64	2.84		
Total	182.54	66			

As illustrated in Table 4, the three groups of participants in high school were nearly of the same level of grammar knowledge at the outset of the study ($F_{(2, 64)}$ = 0.120, P=0.88 > 0.05) and there were no significant differences among them. An attempt to observe the ethics in research and obtain informed consent, and further screening of the proficiency test results of the participant that was carried out to maximally assure the homogeneity of the volunteer participants' proficiency level left the study with 51 participants who scored between one standard deviation above and below the mean who were quite willing to be a part of research project in the high school context. Next, the selected participants in each site were randomly put into three study groups. Two groups were to be considered as experimental ones (A and B), and the remaining groups in the two sites were considered as the control group (Group C).

At the beginning of the treatment, a multiple choice static test of the grammar points which were intended to be respectively taught and assessed in each one of the educational sites were extracted from Barron's TOEFL test book (1996, sixth edition) and given to the participants of the groups in the two sites and the test results were compared using ANOVA analysis. Tables 5 and 6 summarize the analyses outputs for the two contexts.

Table 5
ANOVA analysis of the language institute participants' pretest results

Groups	N	Mean	SD	df	F	Sig
A (interactionist)	15	11.13	1.68	2	.12	.88
B (interventionist)	15	10.86	3.15	42		
C (Static assessment)	15	11.33	2.58	44		

As Table 5 indicates, the participants of all three groups of the language institute were not significantly different ($F_{(2, 42)}$ =.127, P=.88 > 0.05) in their knowledge of the intended grammar points.

The grammar pretest results of the high school participants were also fed into an ANOVA, the results of which are displayed in Table 6.

Table 6
ANOVA analysis of the high school participants' pretest results

Groups	N	Mean	SD	df	F	Sig
A (interactionist)	14	10.28	.99	2	.96	.38
B(interventionist)	17	10.88	1.36	48		
C(Static assessment)	20	10.50	1.23	50		

The results summarized in Table 6 revealed that participants were nearly at the same level of knowledge in the intended grammatical areas and differences were not statistically significant ($F_{(2, 48)}$ =.968, P=.38 > 0.05).

In the second stage, 12 sessions of instruction and assessment were held for all groups. Group A participants of both sites were to receive interactionist DA, while group B members were to be taught and assessed based on interventionist DA approach, however, group C participants were taught and assessed through the conventional static assessment procedures. In each treatment session, all participants were presented with and taught some common predetermined grammatical points followed by short quizzes of the same grammar points. Next, the peculiar treatment for each group, as is described, below started:

In group A (interactionist DA group), Feurestein's interactionist model was applied. Based on this model, the researcher/teacher interacted and cooperated with the learners to uncover and solve their grammatical errors in each item of the session quizzes. The assessor put the participants into some smaller groups or teams, sat with each group, interacted with them to find the problematic issues, and if necessary helped them use the correct form. Furthermore, the teacher asked the learners to interact with each other and assist their group mates whenever needed.

For group B, Sandwich model of DA (Sternberg & Grigorenko, 2002, as cited in Poehner, 2008) was applied. After each quiz, the researcher applied scaffolding strategies to help the participants improve their abilities using hints and prompts introduced in Aljaafreh and Lantolf's (1994) regulatory scale. Based on this scale, the mediator provided feedback, gave explanations and asked the learners why they chose the wrong options. Sometimes peer correction and collaboration were also used. For this group the researchers mediated the participants' development using the more implicit to more explicit strategies (0-12) of regulatory scale (Aljaafreh & Lantolf, 1994).

And finally group C (the control groups) received no mediation after each session quiz. Upon the completion of the treatment which lasted for 12 thirty minute sessions, all participants had a week to review the grammatical points they learnt during the treatment. Then, they were given the posttest so that their improvement and development in L2 grammar were measured and compared.

3.5. Data Analysis

The obtained data of the study were fed into SPSS software and the required analyses needed to test the hypotheses and respond each research question were carried out. Two One–way ANOVA analyses were run to answer the first and second research questions which sought to separately compare the interactionist DA, interventionist DA and the conventional static testing procedures in the two contexts of high school and language institutes and a Two-way ANOVA analysis was run to answer the third research question which was to consider the context of education i.e., high school, and language institutes, as the moderating independent variable alongside the main three level assessment procedure as the main independent variable. Out of four main assumptions of ANOVA analyses, the first two i.e., independence of data, and the interval level of measurement of the dependent variable, were observed at the study design stage when the participants were each put into single distinctive observation groups and the data collection instruments and tests were so designed or chosen to collect maximally interval data, however, concerning the third and fourth assumptions of ANOVA analysis, in addition to the observation of box plots, skewness statistic was checked as a measure of normality for all obtained data and none of the obtained skewness figures i.e., -.127, -.117, .238, .129 exceeded the criterial level i.e., 1 (Larson-Hall, 2010, p.79), moreover, as a measure of equality of variances, Levene statistic was checked for all groups' obtained proficiency, pre and posttests data and the respective obtained values i.e., 1.820, 1.890, .770 did not feature any significant differences between the variances and hence the variances equality assumption was guaranteed.

4. Results

In order to answer the first research question, i.e. , is there any significant difference between the effects of interactionist and interventionist DA models and the static conventional assessment on the Iranian high school EFL learners' grammar learning, the posttest scores of the three groups of high school were compared and the comparison results are described below in Table 7.

Table 7
Descriptive and inferential statistics of high school groups' posttest results

Groups	N	Mean	SD	df	F	Sig
A (interactionist)	14	12.64	1.27	2	16.19	0.00
B(interventionist)	17	14.00	1.41	48		
C(Static assessment)	20	11.30	1.55	50		

As is revealed in Table 7, there is significant difference among the performances of groups ($F_{(2, 48)}$ =16.198, P=0.00 < 0.05). Furthermore, in order to locate exact location of differences, a Tukey post hoc test was run. The results are presented in Table 8.

Table 8
Tukey post hoc test of high school groups' posttest results

Group(I)	Group(J)	Mean difference	Std. Error	Sig
Interactionist	Interventionist	-1.35	.51	.03
	Static assessment	1.34	.50	0.27
Interventionist	Static assessment	2.70	.47	.00

The post hoc analysis revealed the lack of significant difference between interactionist DA and static assessment procedures in high school setting while the differences between interactionist versus interventionist, and interventionist versus static assessment procedures were quite significant. As a result, and considering the mean score of the interventionist DA group (M=14), it was concluded that interventionist DA procedure was of higher efficiency for the grammar learning of EFL learners in high school than the interactionist DA and static assessment.

The same comparative analysis was done on the posttest results of the language institute participants in an attempt to answer the second research question, i.e. is there any significant difference between the effects of interactionist and interventionist DA models and the static conventional assessment on the Iranian EFL learners' grammar learning in language institutes. Table 9 displays the descriptive and inferential statistic information of the analysis.

Table 9
Descriptive and Inferential statistics of 3 language institute groups' posttest results

Groups	N	Mean	SD	df	F	Sig
A(interactionist)	15	16.20	1.32	2	13.64	0.00
B(interventionist)	15	14.40	2.32	42		
C(static assessment)	15	12.60	1.91	44		

As shown in Table 9 there were statistically significant differences among groups ($F_{(2, 42)}$ =13.464, P=0.00). In addition, to find out the exact location of differences among the groups, a Tukey post hoc test was run. The results of which are shown in Table 10.

Table 10
Tukey post hoc test of language institute groups' posttest results

Group(I)	Group(J)	Mean difference	Std. Error	Sig
Interactionist	Interventionist	1.80	.69	.03
	Static assessment	3.60	.69	.00
Interventionist	Static assessment	1.80	.69	.03

As is summarized in Table 10, the post hoc test verified the superiority of interactionist DA over interventionist DA and static assessment in terms of its effects on grammar test performance of EFL learners. Moreover, both interactionist and interventionist DA procedures are proved to more effective for grammar learning of EFL learners than the static assessment procedure.

Finally, in order to answer the third research question, i.e. is there any significant difference among the effects of interactionist DA, interventionist DA, and conventional static grammar assessment procedures on the grammar learning of the Iranian EFL learners' of mainstream high schools and private language institutes, the posttest scores of participants in the two sites of high school and language institute were compared with each other through a two-way ANOVA factorial analysis. The results of the comparison are shown in Table 11.

Table 11
Two-way ANOVA analysis of the language institute and high school groups' posttest results

Variances	Mean Square	df	F	Sig
Place of instruction	72.68	1	26.06	0.00
Type of assessment	61.20	2	21.94	0.00
Place & Assessment	19.90	2	7.13	0.00
Error	2.78	90		

As presented in Table 11, the results of two-way ANOVA revealed both place of instruction and kind of assessment (3 X 2 factorial design) had significantly affected the grammar learning of EFL learners.

5. Discussion

Dynamic assessment as an alternative assessment mode has emerged on the basis of socio-cultural theory (SCT) and offers a diagnostic understanding of learners' problems through the provision of specific mediation in the form of hints and prompts during assessment process and helping learners solve their problems (Lantolf & Poehner, 2008). As mentioned earlier, researchers have studied the efficacy of different modes of dynamic assessment in different educational contexts but the comparative study of the pedagogical effects of interactionist and interventionist DA modes seemed to have not been amply done and in an effort to address the lacuna, the present study compared the effects of the two modes of DA both with each other and with a traditional static assessment mode on grammar learning of EFL learners in Iranian mainstream general education system and the institutional EFL learning context. For this purpose three research questions were raised. First, it was tried to see if there is any significant difference between the effects of interactionist and interventionist DA models and the static conventional assessment

on the Iranian high school EFL learners' grammar learning. The second research question addressed the significance of the difference between the effects of interactionist and interventionist DA models and the static conventional assessment on the Iranian EFL learners' grammar learning in language institutes. Finally, the third research question was raised in an attempt to explore if there is any significant difference among the effects of interactionist DA, interventionist DA, and conventional static grammar assessment procedures on the grammar learning of the Iranian EFL learners' of mainstream high schools and private language institutes.

The results of study showed that both modes of DA had significant positive effects on the grammar learning of EFL learners and their effects overrode the impacts of the traditional assessment procedure. Moreover, interactionist DA approach was shown to be more effective in institutional EFL context which is featured by limited number of EFL learners in its classrooms, while interventionist DA yielded better results in EFL classes with larger number of participants which are more typical of the mainstream educational contexts in Iran. Furthermore, both the 'type' of assessment and the 'place' of assessment had determining roles on the grammar learning of EFL learners. It was also found that compared with DA procedures, the traditional static assessment was least effective for the grammar learning of EFL learners in both contexts.

The findings confirm the positive washback effect of dynamic assessment on EFL learners' language development and are consistent with those of previous studies like Anton (2003), Poehner (2005, 2008), Lantolf and Aljaafreh (1995), Khatib and Ahmadi Safa (2011); however, the results concerning the comparative effects of interventionist and interactionist DA seem to be genuinely contributory to the field as the comparison of the two modes in the given two contexts is apparently conducted for the first time. The point that dynamic assessment was of significant effect on grammar learning of EFL learners is in line with that of Jafary, Nordin and Mohajeri (2012) who studied the effects of DA on EFL learner's syntactic knowledge development. The results demonstrated that DA had a significant effect on syntactic knowledge improvement of the participating EFL learners. Furthermore, Zoghi and Malmeer (2011) who examined the effects of interactionist DA on grammar learning of different age groups came to similar results. Also, the findings of this study fortify the findings of Sadeghi and Khan Ahmadi (2011) who concluded that DA had significant effects on grammar learning of Iranian EFL learners. Sadeghi and Khan Ahmadi (2011) reported that interventionist model of DA significantly improved the L2 grammar learning of EFL learners. The effectiveness of dynamic assessment for the EFL learners' foreign language development is also reported by Alavi, Kaivanpanah and Shabani (2012), and Anton (2003). Ahmadi Safa and Hamzavi (2013) also partially confirmed that while traditional static assessment is unable to find the origins of learners' difficulties, dynamic assessment can assist language learner to solve their problems, and teachers to predict the future performance of their learners. Also, they reported DA to be able to help teachers better differentiate their EFL learners in terms of their language competence. Further supportive results for the present study findings were reported by Lantolf and Aljaafreh (1995) who illustrated that learners developed in their ZPD through assistance in mediation sessions, and Anton (2009) that showed that DA based mediation sessions, led to a better understanding of the actual and emergent abilities of the learners.

Furthermore, the results of this study showed that in high school classes which typically include a larger number of learners than the institutional EFL context, interventionist DA model was more effective than the interactionist procedure. A reason for the better effect of interventionist procedure in the mainstream educational context might be found in Lantolf and Poehner's (2004) argument. They argued that interventionist procedure "...provided a more complete picture of learners' ability because it allowed the researchers to group students as low, moderate and high performers, and to make instructional recommendations for how to better help each groups in the future" (p.61). So, it indicates that the existence of larger number of the learners might enable the teacher to better classify them in to similar

groups and provide each group with a more keenly tuned and ZPD-wise mediation. On the other hand, interactionist DA procedure was more effective in institutional EFL context as there were only up to 15 learners in each class in this context which means that the teacher could better and amply interact with individual learners individually and provide them with the contingent, dialogic, and graduated mediation. Lantolf and Poehnner (2004, p.68) maintain that

> in our view whether one favors an interventionist or interactionist approach depends on the goal and circumstances under which an assessment is carried out. Interactionist approaches, because they are more *labor-intense* and *time consuming*, are likely to be more useful in classroom settings involving relatively *small number* of students while interventionist procedures seem more appropriate for large-scale assessment.

They continue that interventionist DA shares feature with summative assessment because of its psychometric properties and because it can be administered in *a large –scale format* and that interactionist DA parallels formative assessment because of its apparent ties to the limited classroom setting.

Concerning the methodological problems of the application of DA and its context of application Yildrim (2008) argued that this method of assessment cannot be applied in all contexts and some issues need to be considered when one applies DA in the curriculum. Haywood and Lidz (2007, p.2) also argue that "In fact, we insist that DA is not for everybody on all occasions but instead constitutes a valuable part of assessment repertoire when used in conjunction with other forms of assessment".

6. Conclusion and Implications

This study was a partial attempt to compare the effects of two modes of DA with that of traditional static assessment on grammar learning of EFL learners in the high schools and language institutes. The results revealed that both interactionist and interventionist DA models had significant effects on grammar learning of EFL learners in both mainstream educational and private institutional EFL contexts; however, interactionist DA was more effective in institutional context and interventionist DA approach was more effective in the mainstream educational context than interactionist DA procedure. These results are in line with Lantolf and Poehner (2004) who argue that interactionist DA is a time consuming activity and it can be applied by limited numbers of learners while interventionist DA can be administered for " large- scale assessment". The obtained results imply that the alternative modes of assessment which promote integration of once opposite extremes of education process, i.e., teaching and assessment, leads to higher levels of educational achievements and the EFL practitioners, teacher trainers, curriculum developers, and the stakeholders in the bureaus of assessment and evaluation need to consider the contribution of such alternative modes of assessment. It is suggested that the stated stakeholders should attend to the introduced paradigm shift more vigorously and integrate the empirically tested alternative interactionist and interventionist DA procedures into the battery of static assessment procedures if not to replace them due to the static assessment procedures practicality appeals.

The findings of this study should be viewed in the light of its limitations. As a major limitation, since the study was carried out with a limited number of Iranian high school students and EFL learners in private language institutions in a limited period of time, any generalization of the findings of this specific study needs to be cautiously done.

References

Ahmadi Safa, M. & Hamzavi, R. (2013).Dynamic assessment in ELT. *Language and Translation Studies, 45*(4), 83-103.

Ajideh, P., & Nourdad, N. (2013). Dynamic assessment revealing individual differences in EFL reading comprehension ability. *International Journal of Social Sciences and Education, 3(2),* 340-350.

Alavi, M., Kaivanpanah, Sh. & Shabani, K. (2012).Group dynamic assessment: An inventory of mediated strategies for teaching listening. *The Journal of Teaching Language Skills*, *3*(4), 28-58.

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*(4), 471-83.

Anton, M. (2003). Dynamic assessment of advanced foreign language learners. Paper presented at the *American Association of Applied Linguistics.* Washington, D.C.

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

Cortus, A. & Stanciu, C. (2014). A study on dynamic assessment techniques, as a method of obtaining a high level of learning potential, untapped by conventional assessment. *Social and Behavioral Sciences, 116*, 2616-2619.

Gipps, C. (1994). *Beyond testing: Toward a theory of educational assessment*. London: Farmer Press.

Haywood, H.C. & Lidz, C.S. (2007). *Dynamic assessment in practice: Clinical and educational applications.* Cambridge: Cambridge University press.

Hidri, S. (2014). Developing and evaluating a dynamic assessment of listening comprehension in an EFL context. *Language Testing in Asia*, 4(4), 1-19.

Jafary, M.R., Nordin, N., & Mohajeri, R. (2012). The effect of dynamic assessment versus static assessment on syntactic development of Iranian college preparatory EFL learners. *English Language Teaching, 5(7*), 149-157.

Khatib, M., & Ahmadi Safa, M. (2011). The effectiveness of ZPD-wise explicit/implicit expert peers and co-equals scaffolding in ILP development. *Iranian Journal of Applied Linguistics, 14(1*), 49-76.

Kozulin, S. & Garb, E. (2002). Dynamic assessment of EFL text comprehension. *School Psychology International,* 23(1), 112-127.

Lantolf, J. P., & Aljaafreh, A. (1995). A second language learning in the zone of proximal development: A revolutionary experience. *International Journal of Educational Research, 23(7*), 619- 632.

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

Lantolf, J. P. & Poehner, M. (2008). Dynamic assessment. In E. Shohamy & N. H. Hornberger (Eds.), *Encyclopedia of language and education* (273-284). London: Springer Science.

Lantolf, J. P. & Thorne, S. L. (2006). The *socio-genesis of second language development.* Oxford: Oxford University Press.

Larson-Hall, J. (2010). *A guide to doing statistics in second language research using SPSS*. Routledge: Taylor & Francis Group.

Minick, N. (1987). Implications of Vygotsky's theories for dynamic assessment. In C. S. Lidz (Ed.), *Dynamic assessment: An interactive approach to evaluating learning potential* (pp. 116-140). New York: Guilford.

Naeini, J. & Duvall, E. (2012).Dynamic assessment and the impact on English language learners' reading comprehension performance. *Language Testing in Asia*, 2(2), 22-41.

Poehner, M. E. & Lantolf, J. P. (2005). Dynamic assessment in the language classroom. *Language Teaching Research, 9,* 233-265.

Poehner, M. E. (2005). *Dynamic assessment of oral proficiency among advanced L2 learners of French.* Unpublished doctoral dissertation. The Pennsylvania State University press, PA.

Poehner, M. E (2007). Beyond the test: L2 dynamic assessment and the transcendence of mediated learning. *The Modern Language Journal, 91(3),* 323-340.

Poehner, M. E (2008). *Dynamic assessment: A Vygotskian approach to understanding and promoting second language development.* Berlin: Springer Publishing.

Sadeghi, K., & Khan Ahmadi, F. (2011). Dynamic assessment of L2 grammar of Iranian EFL learners: The role of mediated learning experience. *International Journal of Academic Research, 3(2),931-936.*

Saslow, J. & Ascher, A. (2012). *Top notch: English for today's world* (2nd ed.). NY: Pearson Education

Shephard, L. A. (2000). *The role of classroom assessment in teaching and learning.* Los Angeles: University of California.

Sternberg, R. J. & Grigorenko, E. L. (2002). *Dynamic Testing. The nature and measurement of learning potential.* Cambridge: Cambridge University Press.

Tajeddin, Z. & Tayebipour, F. (2012). The effect of dynamic assessment on EFL learners' acquisition of request and apology. *Journal of Teaching Language Skill (JTLS).4(2)*.88-118.

Vygotsky, L. S. (1986). *Thought and language*. MIT press: Cambridge.

Vygotsky, L. S. (1987). Thinking and speech (N. Minick, Trans.). In R. W. Rieber & A. S. Carton (Eds.), *The collected works of L. S. Vygotsky: Vol. 1. Problems of general psychology* (pp. 39- 285). New York: Plenum Press.

Vygotsky, L. S. (1998b). The problem of age. In R. W. Rieber (Ed.), *The collected works of L. S. Vygotsky: Vol. 5. Child psychology* (pp. 187-205). New York: Plenum Press.

Yildrim, A. G. (2008). Vygotsky's socio-cultural theory and dynamic assessment in language learning. *Anadolu University Journal of Social Sciences.* 8 (1), 301-308.

Zoghi, M. & Malmeer, E. (2013). Dynamic assessment of grammar with different age groups. *International Journal of Applied Linguistics Studies. 2(1),* 14-19.