



# Dynamic verses formative assessment: A comparative study

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### ABSTRACT

Dynamism pumps the blood to the body of society; therefore, the dynamic and communicative nature of language can not only be considered integral in teaching, but also in assessing a language. Recently, all over the world traditional ways of assessment are trading place with more communicative ones. The primary purpose of this study was to investigate whether dynamic and formative assessment had significantly different impact on improving the listening skills of Iranian EFL Learners. To do so, 90 intermediate male and female learners from a language school in Tehran were elected. A piloted PET was administered as homogeneity test and 60 learners were selected as the participants and randomly assigned into two groups of thirty. To make sure that there is no statistically significant difference between the performances of the two groups in the beginning of the research a listening pretest of PET was administered in both experimental groups. In one group dynamic assessment, through teaching metacognitive strategies, was administered on learners' listening skills, while the other group's listening skill was assessed formatively. After fourteen sessions a posttest of PET was administered for both groups. The evaluation of the findings showed that the dynamically assessed group outperformed the formative one.

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### Introduction

Listening is an active cognitive process involving, hearing, understanding, integrating and responding (Vandergrift, 2004, as cited in Smith, 2006). Many learners need to be a good listener to solve their problems at school, work, travel or other contexts and language schools have answered to these wants by making a variety of courses and materials to maintain the teaching of listening. Over the last two decades, there has been a change towards comprehension and now Listening comprehension is considered as an essential part of learning (Morley, 2001). The teaching of listening comprehension has long been "somewhat neglected and poorly taught aspect of English in many EFL programs" (Mendelsohn, 1994, p.9), while it is at present considered essential in both EFL classrooms and SLA research (Matsuoka, 2009).

Listening skill is engaged in communication and cannot be tested best traditionally in an artificial testing atmosphere of a class; therefore, testing it in a direct (TLU) and communicative way is of utmost importance. 'Dynamic assessment' seems to be one of the appropriate choices to fulfill this purpose.

Poehner and Lantolf (2005) define dynamic assessment (DA) as the interaction between the assessor as intervener and learners as active participant with the aim of making some cognitive changes in the learners during the process of assessing and learning. Vygotsky's sociocultural theory and ZPD, which are the main theories behind the dynamic assessment, can reiterate the interactive and communicative nature of dynamic assessment. This is exactly what we are after for assessing a communicative skill like listening which cannot be considered as a passive skill any more.

However, formative assessment is still another way of testing through a dynamic way which suits testing listening. Black and William (1998) argue that formative assessment,

properly employed in the classroom, will help students learn what is being taught to a substantially better degree.

DA and FA can be differentiated in many ways. While DA can be accomplished formally or informally, it must, by definition, be systematic. It should be remembered that the defining characteristic of DA is the negotiation of mediation aimed at development; in DA, mediation cannot be offered in a haphazard, hit-or miss fashion but must be tuned to those abilities that are maturing, and as they mature further as a consequence of mediation, the mediation itself must be continually renegotiated. This is what it means to engage in the activity that is the Zone of Proximal Development (ZPD) (Leung & Mohan, 2004).

Teachers often fail to interact with students in a way that systematically promotes development. Even when FA is more systematic, it is generally aimed at supporting learner performance (i.e., scaffolding) during a specific task rather than at long term development (Leung & Mohan, 2004). This then is the second difference between DA and FA. To be sure, development may emerge from FA, but it is more or less achieved incidentally rather than intentionally.

The third difference concerns the contexts in which the procedures are used. FA is generally limited to the classroom setting, and indeed is often contrasted with summative assessment. Feedback and assistance provided during summative assessments is assumed to compromise the reliability and validity of any interpretation of test scores. DA, on the other hand, insists upon the fact that assessment and instruction cannot be segregated, as from this perspective, they form a unity needed for learner development. Consequently, when one changes the focus of assessment from measuring task performance to understanding and improving the abilities underlying the performance, interaction during the

administration of an assessment are not a cause for concern but rather an indispensable component of the procedure (Leung & Mohan, 2004).

Based on some research conducted the other language skills like writing and reading, the researchers assume that it's a good way to assess learners' listening comprehension dynamically and formatively through teaching strategies (Rea- Dickins, 2004 thesis). To name some studies, Knodel (1996) investigated the effectiveness of two types of dynamic assessment approaches, in assessing the composition writing of students. Leung and Mohan (2004) worked on classroom based formative assessment of student performance as a pedagogically desirable approach to assessment which is capable of promoting learning and results showed that there was significant improvement in using formative assessment in the classroom.

### **Research question**

This research aimed to study the following research question:

Q. Is there any significant difference between the effect of dynamic and formative assessment on EFL learners' listening comprehension?

### **Participants**

To meet the objectives of this study 90 male and female learners (aged between 18 to 30), who were studying at intermediate level, were selected from a Language School in Tehran (non-probable convenient sampling). They all had the experience of studying English for minimum two years in this Language School. One piloted PET was administered as pretest to check the homogeneity of the participants in terms of their English language proficiency knowledge. Due to the limitations of the administration of the test, the speaking section was skipped and only the Listening, Reading and Writing sections were administrated. Then 60 learners out of 90 who took the scores between one standard deviation above and below the mean were selected and randomly assigned into two groups of 30 learners as two experimental groups. The two experimental groups received different treatments, that is, in one of the groups dynamic assessment was run while the other group was assessed formatively.

### **Instrumentation**

In order to conduct this study the researchers used the following test instructional materials:

1. The Preliminary English Test (PET) was used to check the homogeneity of the participants of the study in terms of their language proficiency level.
2. To make sure that there is no significant difference among the participants in terms of their listening comprehension at the outset of the study the listening section of the test was administered as pretest.
3. The listening section of another version of PET (2001) was administered as posttest.

### **Textbook**

The textbook utilized was American English File (2); however, a series of listening tasks with different topics and lengths was the focus of this study. These tasks were used during treatment sessions. Because it was the first time that experimental groups were facing some kinds of listening strategies dynamically and formatively. Researchers moved from easier to more difficult tasks.

### **Procedure**

First of all for the purpose of selecting a homogeneous group of participants in terms of their language proficiency the PET was administered to a target sample of 90 intermediate

students and as a result 60 learners whose scores fell within one standard deviation below and above the mean were selected and randomly assigned into two experimental groups. Therefore, two classes of 30 learners were selected as two experimental groups (DA and FA).

In order to make sure that there is no significant difference between the performances of the groups (in terms of speaking skill) in the beginning of the research study, the listening part of another PET was run as pretest. The participants took part in the classes three times a week for fourteen sessions, each session took one hour and thirty minutes. Furthermore, listening practices in harmony with the listening activities of the textbook (American English File) were used for both groups. Since one of the primary goals of assessment is to make future learning experiences more effective, the researchers utilized metacognitive strategies for teaching listening comprehension.

In each session of DA group all students went through three phases of DA: Phase one: In each session first the learners were being pretested to establish the level of independent performance of each individual without the mediation of assessor. So the researchers gave the participants some listening tasks of PET as pretest and considered the scores as DA pretest. The Second phase was operationalizing dynamic assessment. The purpose is establishing interaction between intervener (assessor) and learner which aims at producing cognitive changes through teaching listening metacognitive strategies. Learners were given some tasks (more difficult than pretest tasks and beyond their ZPD) to be done in groups with mutual cooperation and based on the strategies which the researchers had provided for them. All listening parts were played for learners three times and each time the researcher explicitly and recurrently asked them to make use of the listening strategies and gave feedback about the related strategy in that part. To complete second phase, first the assessor had learners guess and predict what the listening is going to be about. They shared their ideas with each other and the assessor. The researcher also commented on the ideas before and after the recordings. Students listened to the recording and then verified, corrected, and compared their first hunches. Also the assessor added new information when was necessary and if there were any problems, the assessor would solve them. For the second time, the participants listened to the same recording and they had to verify earlier disagreements, make correction, and write down additional understanding collaboratively, change their written text and comment on each other's papers. The assessor questioned them about the related strategy they had used in this part. For the third time, the participants listened to those sections of the recording that they had not been able to describe. Third phase was a posttest phase which was designed to assess the degree and nature of change. This time learners were asked to do another task of PET independently and alone. The purpose is to see how much of the subject which had been taught was internalized. According to ZPD theory of Vygotsky (1978), what learner could do with the mediation and interaction, it what s/he would be able to do alone in the future. Therefore, what a learner would transfer from the second phase to the third phase of DA is what s/he has internalized. Pretest and post test performance of DA also were compared through a qualitative report.

The other group was assessed formatively. FA was implemented through the instructional conversations that arose between teachers and learners during normal classroom pedagogical activities. The same listening tasks implemented in the first group were performed in FA group; however, the form

of assessing was based on the incidental internal formative assessment which was different from DA in the degree of being systematic in interaction. In FA group, first the assessor used some listening tasks of PET as pretest and considered this score as pretest, like DA group. In second phase, all students listened to the first part of listening and then predicted the words or sentences or story that might hear. They had to talk to each other and share their answers and ideas, but neither there was any feedback from the researcher in this stage, nor there was any practice of listening strategies, namely it was not as systematic and explicit as DA. For the second time, they listened again to the recordings, verified and corrected their guesses through group work. For the third time, learners listened carefully to the recording, just for the sake of gaining detailed information about those details which they were not able to discuss with each other in the class before. At the end of each task the researcher made a conversation and gave them general comments or feedbacks related to the tasks. Finally in the third phase the again learners were asked to go through a listening task of PET with absolutely no help and mediation. Pretest and posttest score of FA were compared through a qualitative report as well. This procedure continued for ten sessions for both groups.

After fourteen sessions and at the end of the term, a posttest listening of PET was administered to be compared with each other and see if there was any statically significant difference between the performances of the two groups.

**Statistical Analyses**

In order to test the null hypothesis of this study, a number of statistical analyses were conducted. First to homogenize the participants, descriptive and inferential statistics were utilized. To check the homogeneity of the two groups at the outset of the experiment, an Independent t-test was performed based on the scores of the students on the listening section of PET. Two matched t-tests were conducted in order to see the groups' progress on the post test.

Since the normality of the distribution of both sets of posttest scores was checked, an independent t-test was run to compare the two experimental groups' mean scores on the listening section of PET test prior to the treatment.

**Table 1. Independent t-test of the Listening Test Prior to the Treatment**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
.000002	Equal variances assumed	.194	.661	.371	58	.712	.3667	.98939	-1.61381	2.94714
	Equal variances not assumed			.371	57.930	.712	.3667	.98939	-1.61386	2.94719

As it is shown in the above table the variance of the two groups did not turn to be significantly different (F=.194, p=.661>.05), hence the homogeneity of the variance was assured. Based on the above table, the Levene's test indicated the existence of equal variances between the two groups and since sig is larger than .05, F=1.94. p=.0661>.05, it can be claimed that the two groups were almost homogeneous in terms of their listening comprehension prior to the administration of the treatment. Since the observed p value (.005) was higher than its critical value (.05), it could be concluded that there was no significant difference between the two experimental groups' mean scores on the listening test of PET prior to the treatment.

**Table 2. Independent t-test of the Post-test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
.000002	Equal variances assumed	3.605	.063	-2.902	58	.005	-2.73333	.94179	-4.61654	-.89113
	Equal variances not assumed			-2.902	55.061	.005	-2.73333	.94179	-4.62068	-.84599

The above table shows that the variance of the two groups did not turn to be significantly different (F=3.605, p=.063 >.05), hence the homogeneity of the variance was assured. Based on the above table, the Levene's test indicated the existence of equal variances between the two groups (F=1.48. p=.063>.05).

Considering the obtained results (t=2.9, df=58, p=.005<.5), it can be claimed that there was a significant difference in the performance of the dynamic group on the posttest. The dynamic group's mean score shows significant improvement on the posttest.

Thus, it could be claimed that there was a significant difference between the two groups' scores on the post-test. The dynamic group gained better scores than the formative group. Thus the null hypothesis: 'There is no significant difference between the effect of dynamic and formative assessment on improving EFL learners' listening comprehension' can be rejected.

**Conclusion**

Based on the results, it can be concluded that the participants performed differently on the PET due to the dynamic assessment techniques utilized as the treatment; therefore, the null hypothesis of the study is rejected. The results of the study confirmed the idea of the effect of testing on learning i.e., washback. In assessment the most important factor is washback; teachers should pay attention to their students' learning while testing them. While students are being tested through testing methods e.g., listening in this study, they are being given feedback over their performance by the teacher.

Learner-centered teaching is another factor contributing to the results of the study. Removing teacher as an authority of the class, giving students more roles for their class, this responsibility of learning makes them aware of learning and how they are supposed to carry on a task. Dynamic assessment makes learners the center of attention and this is the best way to guide them through the learning procedures.

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