



The Effect of Dynamic Assessment on the Development of Form and Meaning on News Vocabularies in Iranian EFL Learners

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Abstract

This study investigates the effect of DA on learning form and meaning of news vocabularies among Iranian EFL learners. To do this, 90 students from the population of Iranian EFL learners studying English in Sadat Language Institute in Tehran, Iran were selected. A proficiency test administered and 60 students selected. They were then divided into two groups as experimental and control group. Prior to the instruction, a pretest on the news vocabularies administered to both groups. The experimental group received DA treatment and the control group would not. After eight session's instruction, a posttest was given to both groups. Students' pre- and post-test scores compared to determine if students made any news vocabulary form and meaning development. A 't-test' on the mean scores of both groups indicated a significant difference between the scores of the post-tests, meaning that the DA was significantly effective in the experimental group's learning form and meaning of news vocabularies. Findings led to the conclusion that the experimental group outperformed the control group. The product of this study can help curriculum designers; language instructors and practitioners appreciate the importance of DA and to introduce DA to students to expand their vocabulary knowledge.

Key words: "DA", "EFL learners", "form", "meaning", "news vocabularies".



Introduction

The meaning of the term ‘assessment’ is different when it comes together with Dynamic Assessment (DA). Frequently, the term assessment is used either directly for formal testing instruments or indirectly for other forms of assessment. As a result, two different kinds of assessment called Summative and Formative, and a distinction between them will be described here. As Bachman (1990) puts it, summative assessment reports on the results of learning after the instruction are finished whereas formative assessment comes with the purpose of providing feedback and useful information for the teaching.

Based on the formative assessment, the weak and strong abilities of the learners are identified for the future educational decisions. Therefore, usually, the teachers provide this kind of assessment and use it in their educational settings. On the other hand, summative assessment is related to that kind of standardized and large-scale tests which asks for the lengthy procedures in administration and scoring. The sequence of items, the allocated time, and the language of the questions are among the factors that should be considered in order to have a valid assessment of the ability considered (Bachman & Palmer, 1996).

The scores are compared in order to identify the abilities of the learners on a large scale and for making important decisions about the funds and acceptance into universities to the schools and the students, respectively (Shohamy, 1999). Although standardized tests are now the most proper form of assessment, Ellis (2003) suggests that many formative assessments are used even after these tests. From among the drawbacks of the formative assessment, is its statistical problem, which is needed for standardization. However, in case of administration procedures and interpretation of performance formative assessment equals with its psychometric counterparts. Therefore, instruction and assessment are dichotomized teaching and testing that focus on learning and measuring the learning respectively.

According to Lidz and Gindis (2003), dynamic assessment points to a type of approach to finding out individual differences and their contributions to teaching and learning that ultimately leads to intervention on the heels of the assessment procedure. In the same vein, Haywood and Lidz (2007) assert that “dynamic assessment is an interactive approach to conducting assessments that focuses on the ability of the learner to respond to intervention” (p. 1).

As implied by these definitions, DA opposes any separation of instruction and assessment, resulting in the following outcomes: 1-DA eliminates established and old demarcations between instruction and assessment. 2-DA paves the way for better learning-friendly cooperation between an examiner as a mediator and the examinees as learners. Poehner (2004) asserts that dynamic assessment offers an assessment paradigm which is considerably different from that we are accustomed to thinking of.

As another variable of the current study, form, according to Lewis (2000), refers to the mechanics of the language, either in terms of grammar or vocabulary. With regards to grammar, students must understand the sentence structure of a specific grammar rule. With regards to vocabulary, students must understand the pronunciation of a word. If in a written text, then students must know how to spell a word. Prefixes, suffixes, and roots are also important, especially at the intermediate and advanced levels. With an understanding of prefixes and suffices, students don't always have to scurry for a dictionary every time they encounter an unknown word. However, students should also learn to readily recognize that the word may be a noun, verb, adjective, or adverb. This is becomes possible by devoting a portion of the lesson to form (Lewis, 2000).



Concerning the meaning, Lewis (2000) argues that it is the mental image/comprehension that is generated by the grammar or vocabulary. Students connect the grammar structure with the meaning. For example, the past tense signals events in the past, the past perfect signals earlier actions/events in a narrative. Once the teacher has presented the structure, he should talk about the meaning too. When vocabulary is the focus of the lesson, students connect the form of the word with its meaning. This occurs both at the micro- and macro-levels. At the micro-level, the word stands alone. Students understand the image triggered by a specific word. However, at the macro-level, a word may have a different meaning because of the sentence in which it appears. There is often nuance or some other concept generated. In addition, when someone uses a word, there may be other associated word choices selected or triggered (Lewis, 2000).

Significance of the Study

The significance of the present research lied in the fact that the findings of the present study can be used to develop the assessment and evaluation programs tailored to students' needs concerning form and meaning of news vocabularies. The results of the current investigation could shed light on the possible role that first language (L1) may have on the acquisition of vocabularies. In fact, drawing on the results, teachers can help language learners tackle the difficulty involved in the learning of vocabularies. Following that, teachers would possibly be able to provide a more effective and efficient type of assessment when it comes to learning vocabularies. Regarding the theoretical contributions, the nature of dynamic assessment in this study would be investigated further in the light of L1 and therefore scholars may gain more insights into the possible interaction which may exist in the combined effect of dynamic assessment and L1 transfer on the learning of news vocabularies.

Method

Participants were a sample of 90 students from the population of Iranian EFL learners studying English in the Sadat Language Institute in Tehran, Iran. This study conducted with Iranian learners only whose age range was from 18 to 30. Their average age was 24 years and their proficiency level was pre-intermediate. A proficiency test (OPT) administered and 60 students selected. They were then divided into two groups as experimental and control group. Prior to the instruction, a pretest on the news vocabularies administered to both groups. The experimental group received DA treatment and the control group would not. Considering the DA principles, the following steps were taken to mediate and intervene in a DA manner to teach the news vocabularies under instruction:

- 1) The texts available in the news vocabularies distributed to the participants. The news vocabularies under instructions appear on the left pages. Therefore, first the left pages were handed out. About ten minutes was given to the learners to study this page.
- 2) The teacher used instruction check questions to assure that the learners were on the right track.
- 3) Ample time given to the participants to complete each exercise.
- 4) The intervention in line with the principles of DA (Pohener, 2004) would unfold in the following stages after the learners were done with the exercises.
- 5) The teacher asked one of the learners to read the answer to the first item in the exercise section.
- 6) Upon receiving the answer the teacher asked the learner why they thought the answer was right.



- 7) If the learner could not think of a reason, the researcher would try to provide them with some intervening steps e.g. asking him to look at the meaning of the news vocabularies in the left hand page and asking the learner to look at the context in which the news vocabularies has been used.
- 8) If the learner could not think of a reason yet the teacher provided more news contexts in which the vocabularies had been used.
- 9) In case the answer was wrong up to this level, the learner might choose the right answer and be able to provide a reason behind his choice.
- 10) If the learner was still unable to think of a reason and provide the correct answer, the teacher would move on to another learner. If all the learners believe the answer was right and it is in fact right, the teacher would just ask for an explanation and simply move on to the next item.
- 11) The above-mentioned procedure would be followed for each item of the exercises provided. When the learners were done with the exercises, the researchers would move on to the next stage which was the production of the language they had learnt.
- 12) The learners would be asked to use each of the news vocabularies under instruction in a sentence.
- 13) The teacher would ask one of the learners to read her first sentence. If the news vocabularies had been used wrongly, the teacher will start the mediation and intervention process in the same manner provided for the exercise section. The aforesaid procedures would be taken drawing on the ZPD's concept of "step by step" learning. ZPD is the main underpinning of DA (Poehner, 2004). This teaching course would be developed in a way so as to fulfill this purpose. That is, the instructor starts with the first step and moves thoroughly to the other stages by the time the participants are able to learn the news vocabularies and use them in sentences appropriately. After eight session's instruction, a posttest would be given to both groups. Students' pre- and post-test scores would be compared to determine if students made any news vocabulary form and meaning development.

Results Discussion

The first research question of this study aimed at seeing does dynamic assessment have any significant effect on development of form on news vocabularies in Iranian EFL learners. In order to investigate this research question, independent sample *t*-test was conducted "Table 1".

Table 1-independent samples test for two groups' scores on news vocabulary test pre-test

Levene's Test for Variances				T-test for Means			
Factor	<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	Sig. (2-tailed)	Mean Diff.	
Equal variances assumed	1.925	.171	.902	58	.371	.383	



Equal variances not assumed	.902	55.703	.371	.383
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As a glance at “Table 1” shows, t -value and significance level ($t(58) = .90, p = .37, p > .05$) are indicative of no significant difference in news vocabulary test scores for experimental ($\bar{x} = 13.03$) and control ($\bar{x} = 12.65$) groups on the pre-test. In fact, the t -observed is below the t -critical of 2.00; thus, the students in the two groups had approximately the same level of news vocabulary test at the beginning of the study. “Table 2” reflects the mean and standard deviation of the experimental ($\bar{x} = 14.66, SD = 1.42$) and control ($\bar{x} = 13.48, SD = 1.50$) groups on post-test of news vocabulary test.

Table 2-descriptive statistics of two group's scores on the news vocabulary test post-test

Group	N	Mean	SD	Std. Error Mean
Experimental	30	14.667	1.428	.260
Control	30	13.483	1.499	.273

The results of independent t -test that was performed to compare experimental and control groups' news vocabulary test scores on the post-test are set forth in “Table 3”.

Table 3-independent samples test for two groups' scores on news vocabulary test post-test

Levene's Test for Variances			T-test for Means			
Factor	F	Sig.	T	Df	Sig. (2-tailed)	Mean Diff.
Equal variances assumed	.006	.939	3.129	58	.003	1.183
Equal variances not assumed			3.129	57.862	.003	1.183

A cursory look at “Table 3” indicates that the assumption of equal of variances is met ($p = .93, p > .05$). Additionally, independent t -test found a statistically significant difference ($t(58) = 3.12, p = .003, p < .05$) in news vocabulary test measures for the experimental group ($\bar{x} = 14.66$) and control group ($\bar{x} = 13.48$). Also, the t -observed was below the t -critical of 2.00. Accordingly, the researcher rejected the first null hypothesis that states, “Dynamic assessment has no significant effect on the development of form on news vocabularies in Iranian EFL learners” and claimed that dynamic assessment enhances Iranian EFL learners' development of form on news vocabularies. A bar graph “Figure 1” was drawn to illustrate the results of both pre-test and post-test obviously. As demonstrated in the figure, the average mean score of the students in the experimental group is noticeably larger than the average mean score

of those in the control group regarding news vocabulary test in the condition that they the average mean scores of the two groups have not been different highly on the pre-test of news vocabulary test.

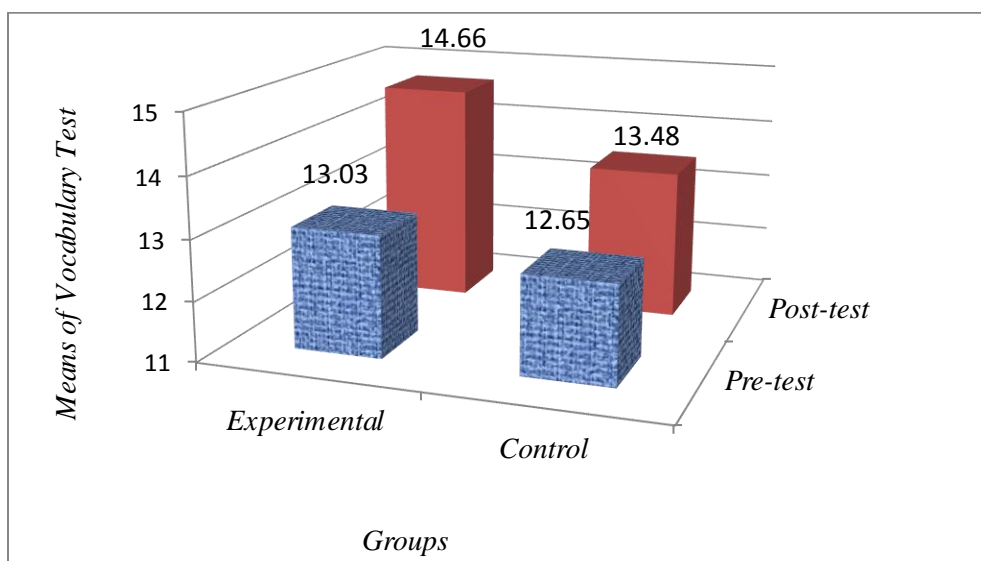


Figure (1) two groups’ means on news vocabulary test (pre-test & post-test)

The purpose of the second research question was to investigate does dynamic assessment have any significant effect on development of meaning on news vocabularies in Iranian EFL learners. The researcher ran independent sample *t*-test for investigating this research question. “Table 4” below demonstrates the results of independent *t*-test comparing the experimental and control groups’ vocabulary scores on the pre-test.

Table 4-independent samples *t*-test for meaning on news vocabulary scores (pre-test)

Levene's Test for Variances			T-test for Means			
Factor	<i>F</i>	<i>Sig.</i>	<i>T</i>	<i>Df</i>	<i>Sig.</i> (2-tailed)	Mean Diff.
Equal variances assumed	.950	.334	.871	58	.387	.069
Equal variances not assumed			.871	57.541	.387	.069

According to Table 4, the equality of variances assumption is met as the significance level (.33) for Leven’s test is above.05. Also, the table indicates that there was no statistically significant difference ($t(58) = .87, p = .38, p > .05$) in vocabulary scores for experimental ($\bar{x} = 2.66$) and control ($\bar{x} = 2.59$) groups on the pre-test, in which the *t*-observed was less than the *t*-critical (2.00). So, the researcher



came to the conclusion that the students in the two groups have the same level of meaning on news vocabularies at the outset of the study. More, the researcher performed another independent *t*-test “Table 5” to compare experimental and control groups' meaning on news vocabularies scores on the post-test.

Table 5-descriptive statistics of two group's meaning on news vocabulary scores (post-test)

Group	<i>N</i>	Mean	<i>SD</i>	Std. Error Mean
Experimental	30	2.833	.215	.039
Control	30	2.643	.268	.049

“Table 5” represents the mean and standard deviation of the experimental group ($\bar{x} = 2.83$, $SD = .21$) and control group ($\bar{x} = 2.64$, $SD = .26$) on the post-test of meaning on news vocabulary. According to “Table 6” below, the significance level (.29) associated with Leven’s test is less than .05, so the assumption of equal of variances is met.

Table 6-independent samples *t*-test for meaning on news vocabulary (post-test)

Levene's Test for Variances			<i>T</i> -test for Means			
Factor	<i>F</i>	<i>Sig.</i>	<i>T</i>	<i>Df</i>	<i>Sig.</i> (2-tailed)	Mean Diff.
Equal variances assumed	1.125	.293	3.035	58	.004	.19067
Equal variances not assumed			3.035	55.399	.004	.19067

As seen in “Table 6” above, independent *t*-test found a statistically significant difference ($t(58) = 3.03$, $p = .004$, $p < .05$) in meaning on news vocabulary scores for experimental ($\bar{x} = 2.83$) and control ($\bar{x} = 2.64$) groups on the post-test, in which the *t*-value of 3.03 is below the *t*-critical of 2.00. Subsequently, the second null hypothesis of the study that says “Dynamic assessment has no significant effect on the development of meaning on news vocabularies in Iranian EFL learners” was rejected, and therefore the researcher can claim that dynamic assessment has significant effect on the development of meaning on news vocabularies in Iranian EFL learners.

As it was demonstrated, the results of the *t*-test revealed that the participants made progress in their form and meaning on news vocabularies test. In particular applying the principle of DA helped the students improve their development of form and meaning on news vocabularies. The results supported the findings of Brown, Pressley, Van Meter, and Schuder’s (2005) and Sporer, Brunstein, and Kieschke (2009). They adopted a similar method to teach student and the findings revealed that at the posttest, the intervention students attained higher scores on a vocabulary than the control students. The results of



the data analysis showed that there was a significant difference between the two groups because of the treatment given to them. The findings of the study rejected the null hypothesis. It was concluded that there was significant evidence with regard to the impact of DA on vocabulary. The findings of this study are in line with the results of other studies carried out previously by other researchers who tried to investigate the effect of using DA on different language skills such as Adeyemi (2008) who studied the impact of DA on general language proficiency of learners. The findings are also in agreement with the findings of Adams (1995), Ghaith (2003), Stevens (2003) all of which confirm the positive effect of DA on the performance of EFL learners in different language skills.

Conclusions

The comparison of both groups' vocabulary form and meaning improvement in the pretest and posttest has helped us find out the answer to the research questions of the study. The pretest was designed for testing the subjects' English vocabulary knowledge to get some pre-examination of the two groups before the experiment. As mentioned previously, the control and experimental groups performed almost the same. However, the comparison of the posttest showed that there was a significant difference between the performance of control group and experimental groups. On the whole, the current study has brought out enough evidence to come to the conclusion that the use of DA has positive effect on the learners' English vocabulary form and meaning improvement. Concerning the previous studies in the literature, the current research confirms more value of DA for learning vocabulary. In their investigation into L2 vocabulary acquisition, Nation (2001) and Krashen (1989) claim that incidental vocabulary acquisition through DA does occur.



References

- [1] Adeyemi, N. (2008). *Implications of Vygotsky's theory for dynamic assessment*. Oxford: oxford University press.
- [2] Adams, S. (1995). The once and future issues of validity. Assessing the meaning and consequences of measurement. In H. Wainer and H. Braun (Eds.), *Test validity* (pp. 33-45). Hillsdale, NJ: Lawrence Erlbaum.
- [3] Brown, J. P., Pressley, M. E., Van Meter, K., & Schuder, L. (2005). The unfairness of equal treatment: objectivity in L2 testing and dynamic assessment. *Educational Research and Evaluation*, 19(2-3), 141-157.
- [4] Bachman, M. R. (1990). Dynamic assessment for at-risk readers. *Journal of Reading*, 33(7), 528-533.
- [5] Bachman, P. & Palmer, N. (1996). The Effect of Dynamic Assessment on EFL Reading Comprehension in Different Proficiency Levels, *Language Testing in Asia*, 2(4), 101-115.
- [6] Ellis, J. (2003). *Identifying the organization of writing processes*. In Gregg, Lee; Steinberg, Erwin (eds.) *Cognitive processes in writing: An interdisciplinary approach*. Hillsdale, NJ: Lawrence Erlbaum, 3-30.
- [7] Ghaith, D. (2003). Introduction: making the move to peer learning, in D. Boud, R. Cohen and J. Sampson (eds.) *Peer Learning in Higher Education – learning from and with each other*, London: Kogan Page, 1-17.
- [8] Haywood, D. & Lidz, S. (2007). Approaches to productive peer review. In D. Roen, Pantoja, V. Yena, L., Miller, S., and Waggoner, E., (Eds.), *Strategies for teaching first year composition* (pp. 290-300). Urbana: NCTE.
- [9] Krashen, S. (1989). We Acquire Vocabulary and Spelling by Reading: Additional Evidence for the Input Hypothesis. *The Modern Language Journal*, 73, 440-464. <http://dx.doi.org/10.1111/j.1540-4781.1989.tb05325.x>
- [10] Lewis, S. (2000). *Assessing speaking*. Cambridge: Cambridge University Press.
- [11] Lidz, S., & Gindis, B. (2003). Dynamic assessment of the evolving cognitive functions in children. In Kozulin, A., Gindis, B., Ageyev, V. S., & Miller, S. M. (Eds.), *Vygotsky's educational theory in cultural context* (pp. 108-114). Cambridge, Cambridge University Press.
- [12] Nation, I.S.P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- [13] Pohener, L. M. (2004). *The art of teaching writing*. Portsmouth, NH: Heinemann.
- [14] Stevens, D. (2003). *Thinking constructively about science, technology and society education*. Albany, NY: State University of New York Press
- [15] Sporer, J. N., Brunstein, J. J., & Kieschke, D. G. (2009). Simplification of Flesch reading ease formula. *Journal of Applied Psychology*, 35(5), 333- 337.
- [16] Shohamy, N. (1999). Cognitive and effective outcomes of an intensive student team learning experience. *Journal of Experimental Education*, 50, 29-35.