

THE IMPACT OF E-LEARNING ON IRANIAN EFL LEARNERS LISTENING COMPREHENSION ABILITY

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ABSTRACT

The present investigation was an attempt to study the effect of e-learning on Iranian EFL learner's listening comprehension ability. To that end, a PET test was administered to 100 university students learning English language in institutes. Learners who scored between one above and below the standard deviation were selected. 40 learners were selected and they were divided into experimental and control group, each group contained 20 learners. A listening comprehension test was administered to both groups as a pre-test to take their initial knowledge of listening comprehension. The listening section of the TOEFL test was selected to test the listening ability of the participants.. The experimental group received treatment in order to help them improve their computer and the Internet use in ten sessions .The control group received no treatment. Finally both groups sat for the post-test of the same listening comprehension test. The results were analyzed through ANCOVA and it was explored that e-learning had a positive effect on Iranian EFL learner's listening comprehension ability.

Keywords: *Listening Comprehension, E-learning, Multimedia*

INTRODUCTION

Statement of the Problem

Listening comprehension is now generally acknowledged as an important facet of language learning; nevertheless, "much work remains to be done in both theory and practice" (Morley, 2001). "The importance of listening in language learning can hardly be overestimated, as people always do more listening than other skills. Through reception, we internalize linguistic information without which we could not produce language" (Douglas, 2001). Listening involves a complex process that allows us to understand and interpret spoken messages in real time by making use of a variety of sources such as phonetic, phonological, prosodic, lexical, syntactic, semantic, and pragmatic (Lynch, 1998). With the increased use of computers and the advent of the Internet, e-mail, digital materials, e-journals, to get information is not only from paper but also from computers. Online reading serves as one of the sources of input for L2 readers. Electronic texts introduce new supports as well as new challenges that can have a great impact on an individual's ability to comprehend what he or she reads. Today, computer technology has been integrated into almost every aspect of learning in higher education. In fact, "the Internet has become an important part of college student's lives, not only for their studies and daily routines, but as a tool for getting to know other people and the rest of the world" (Chou and Hsiao, 2000). It is generally assumed that computer users need a special literacy competence to control monitors. However, such beliefs are largely lacking in empirical verification. Even though some studies have been conducted to examine whether the past experience of using computer may affect listening comprehension, the results are inconsistent.

Significance of the Study

The current study intends to examine the effects of e-learning on student's listening comprehension in the Iranian college English context. It is believed that the results of this study have some benefits for Iranian College English listening instruction, listening instructors as well as non-English majors in their online teaching and learning.

Recent advancement in computer monitors, and software means that mainstream technology provides the users with unprecedented control over the screen/text image with which they interact (Douglas *et al.*,

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2001). Computers and the Internet play an increasingly important role in the lives of L2 readers. Online listening serves as one of the sources of input for thousands of L2 readers.

Review of the Related Literature

Research on educational technologies has been centered on the issues dealing with their effectiveness in second language learning and teaching (Meihami *et al.*, 2013; Marzban, 2011). Studies that investigated student's language improvement and evaluation of computer materials as cited in Wiebe and Kabata (2010) (e.g. Ayres, 2002; Christie, 2001; Heller, 2005; Holmes, 1998; Ma and Kelly, 2006; Stepp-Greany, 2002) as total shows positive outcomes, as illustrated by a student's comment reported by Holmes (1998).

With the improvement in technology in 1960s in all aspects of science and especially in language teaching related science, there was a sense of euphoria that this can improve the way of teaching and learning.

At that moment language laboratory, tape recorder, and video projector were all of these technology. The potential offered to language teaching by tape-recorder was enormous - now possible to bring native speaking voices into classroom. Editing and self- recording facilities were now available (Mirhassani, 2003).

According to Brinton and Holten (1997) media help us to motivate students by bringing a slice of real life into the classroom and by presenting language in its more complete communicative context. Media can also provide a density of information and richness of cultural input not otherwise possible in the classroom, they can help students to process information and free the teacher from excessive explanation, and they can provide contextualization and a solid point of departure for classroom activities.

Wiebe and Law (2005) did a survey on how is the effect of computer on listening comprehension on a group of students. The findings of their research revealed the fact that computer materials if be used in constant way could be significant in improving students listening comprehension.

MATERIALS AND METHODS

The study was conducted with 40 Iranian sophomore students who are studying English at different institutes in Iran. Researcher tried to have the same number of female and male participants in both experimental and control group.

Data Analysis Procedure

The results of post test were analyzed for further discussion via ANCOVA on the scores obtained from experimental and control group to see whether e-learning had any effects on EFL learners listening comprehension.

RESULTS AND DISCUSSION

Results

A descriptive statistical analysis was done on the collected data of PET (Preliminary English Test) test. The results are shown in Table (1).

Table 1: Descriptive Statistics for the Proficiency Test

N	Mean	SD
100	32	10.32

This table shows the result obtained from the proficiency test, PET. The mean and standard deviation are presented.

Table (2) shows the number of students who took the pre-test and post-test. It should be mentioned that no one excluded.

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Table 2: Number of Students Participated in Pre-test and Post-test Cases

	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Pre-test*group	40	100%	0	0%	40	100%
Pre-test*group	40	100%	0	0%	40	100%

Forty participants were selected for this study. They were divided into two groups, experimental and control.

The descriptive statistical analysis done on the collected data of pre-test and post-test is shown in table (3).

Table 3: Descriptive statistical analysis done on the collected data of pre-test and post-test

Group		Pre-test	Post-test
Experimental	Mean	59.9	68.4
	N	20	20
	SD	4.8	4.7
Control	Mean	58.45	58.1
	N	20	20
	SD	5.64	5.2
Total	Mean	59.15	63.25
	N	40	40
	SD	5.216	7.121

Interpretive Statistics

Analysis of covariance (ANCOVA) is particularly appropriate when subjects in two or more groups are found to differ on a pre-test or other initial variable. In this case the effects of the pre-test and/or other relevant variables are partialled out and the resulting adjusted means of the post-test scores are compared. Through ANCOVA differences in the initial status of the groups can be removed statistically so that they can be compared as though their initial status had been equated. In this study, in order to investigate the research hypothesis “e-learning has no effect on Iranian EFL learner’s listening comprehension ability”, the differences between mean scores of pre-test and post-test of control and experimental group were calculated through ANCOVA. Before running ANCOVA, the following hypotheses were examined:

1. Linear relationship between variables (pre-test and post-test)
2. Equality of Variances
3. Homogeneity of regression

In order to examine the equality of variances, Levines Test of Equality of Error Variances was run. It tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Table 4: Levine’s Test of Equality of Error Variance

F	df1	df2	Sig
.26	1	38	.61

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According to table (5) the calculated F is not meaningful. So there is equality of variances and ANCOVA can be run.

The data in table (6) are related to test of homogeneity of regression. Before running covariance, between-subjects effects of pre-test-group should be investigated.

Table 5: Tests of Between-Subjects Effects

Source	Type III Sum of Square	df	Mean Score	F	Sig
Corrected Model	1879.82	3	626.61	230.93	.00
Group (a)	17.86	1	17.86	6.6	.015
Pretest (b)	802.97	1	802	295.95	.00
Group*pretest(a*b)	.41	1	.41	.15	.7
Error	97.68	36	2.71		
Total	46200	40			

As table (6) shows, between –subjects effect (a*b) is not significance (F=0.15, Sig=0.7). It shows that the data supports homogeneity of regression. Therefore, covariance should be run just for between – subjects effect of post-test and group to show whether mean scores of two groups are the same or not. The results of this analysis are demonstrated in table (7).

Table 6: Mean and Corrected Mean of Reading Comprehension Ability

Source	Posttest M	SD	Corrected Mean M	SE
Experimental	38.4	4.7	37.77	.36
Control	28.1	5.11	28.72	.36

Table (7) shows the corrected means of dependent variable listening comprehension ability. The data demonstrate that the means of experimental group are upper than control group.

Sum of analysis of covariance (ANCOVA) of reading comprehension ability in experimental and control group after eliminating between-subjects effect is demonstrated in table (4.8):

Table 7: Sum of analysis of covariance

Source	Type III Sum of Square	df	Mean Score	F	Sig	Partial Eta Squared
Corrected Model	1879.415	2	939.71	354.48	.00	.95
Pretest	818.52	1	818.52	308.76	.00	.89
Group	805.42	1	805.48	303.84	.00	.89
Error	98.08	37	2.65			
Total	46200	40				

As it can be seen, the corrected model (f=00, F=354.48) is statistically significant. The results (F=303.84 , Sig=.00, Eta=.89) shows that there is a difference between two groups. It means that there is significance difference between experimental and control group. As a result the null hypothesis “e-learning has no effect on Iranian EFL learners listening comprehension ability” will be rejected, so it can be concluded that e-learning has an effect on Iranian EFL Learners listening comprehension ability.

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Conclusion

As expected, the results show that students who had access to computers and the Internet performed significantly better than students without computers on the listening comprehension test. Participant's in experimental group had higher listening comprehension scores than those of control group. This suggests that e-learning have a positive impact on listening comprehension. The main effects of e-learning were found for listening comprehension. The result revealed that e-learning affected the student's listening comprehension. The finding supported the results concluded by previous studies that computer literacy affects performance (e.g. Wiebe and Law). According to Hess and Miura (1985), the less experience and less exposure to the computer the subjects have, the more interference they may encounter in the listening process via computers.

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