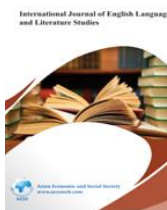




International Journal of English Language and Literature Studies

ISSN(e): 2306-0646/ISSN(p): 2306-9910

URL: www.aessweb.com



ON THE EFFECT OF SECOND LIFE (AN ONLINE VIRTUAL WORLD) ON PRE-INTERMEDIATE IRANIAN EFL LEARNERS LISTENING AND SPEAKING ABILITIES



Hamideh Mohammadzadeh Shahri^{1†} ---Hamid Ashraf²

^{1,2}English Language Department, Torbat-e-Heydariyeh Branch Islamic Azad University, Iran

ABSTRACT

The current study aims at investigating the effect of Second Life (an Online Virtual World) on Iranian EFL learners' listening and speaking abilities. In addition, the researchers want to find out the different effect of Second Life on EFL learners' listening and speaking abilities. The participants consisted of 50 pre-intermediate Iranian EFL learners selected from 80 students based on their score in tests. They were divided into two groups, one experimental and one control group. In order to collect data, two instrumentations were utilized, including a speaking test and a listening test. The researchers used a quasi-experimental design with a pretest-treatment-posttest sequence. By comparing the mean scores via t-test, the researchers found that there is a statistically significant difference between the pretest and posttest of Experimental group in both speaking and listening. It also showed a significant different effect on listening and speaking abilities. Therefore, Second Life as an online virtual world has a significant effect on Iranian EFL learners' listening and speaking abilities; in addition, it helps learners learn better in this environment. This environment can also be used as a useful space for learning and teaching of a variety of subjects.

© 2016 AESS Publications. All Rights Reserved.

Keywords: Second life, Online virtual world, Listening skills, Speaking skills, EFL learners, Virtual environment of education.

Received: 8 May 2015/ **Revised:** 31 August 2015/ **Accepted:** 5 September 2015/ **Published:** 15 September 2015

Contribution/ Originality

This study is of very few studies which have investigated the effect of Second Life on Iranian EFL learners' listening and speaking abilities. The results showed that this environment can be used as a useful space for learning and teaching of different subject.

1. INTRODUCTION

1.1. Background and Purpose

The rapid evolution of Information Computer Technologies (ICTs) in the 21st century attracts great attention all over the world. Educational institutes use these technologies as tools to communicate easily and efficiently with students. According to Felix (2002) and Zhao (2003) the use of technology in language teaching and learning has been the most important subject in scholarly discourse and research for many years. One of these technologies is virtual environment. It is clear that learners have a great attention to technology and most of them try to participate in specific virtual world environments. Virtual world environments such as Second Life (SL) have a great potential on interaction and communication among people. According to Aydin (2013) the use of SL in foreign language

† Corresponding author
DOI: 10.18488/journal.23/2016.5.1/23.1.8.19
ISSN(e): 2306-0646/ISSN(p): 2306-9910
© 2016 AESS Publications. All Rights Reserved.

instruction reduces anxiety and increases motivation to learn a foreign language. He also stated that SL has powerful effects on collaborative and autonomous learning, interaction and communication among English as foreign language (EFL) learners. Learners can interact and engage in SL groups to share their knowledge as stated by Peterson (2012) SL is beneficial to participation and engagement of EFL learners. This interaction needs learners' skills in various ways.

For these purposes, the researchers used this environment as a platform for practicing listening and speaking skills in groups through interaction and communication. According to Aydin (2013) SL improves cultural identity, intercultural literacy and provides a cultural competence environment and allows learners to practice activities that are difficult to organize in traditional classroom environment.

So far, there have been some researchers (Henderson *et al.*, 2009; Ma *et al.*, 2009; Macedo and Morgado, 2009; Jauregi and Canto, 2012; Lin *et al.*, 2014) investigating foreign language learning and teaching in Second Life. In this study, as a kind of prediction it seems that using Second Life as a virtual environment is very important in teaching and learning English because students have no stress of real classes, they interact with their peers and native speakers collaboratively and their imaginations are their worlds which may give them self-confidence to participate in class activities and may have better effect and also it may demonstrate that SL has a great potential for learning and teaching which can be improved with the enhancement of technology and communication.

Henderson *et al.* (2009) stated that collaborative language activities in virtual world enhanced students' self-efficacy. They stated that virtual worlds add much more than visual and auditory media, they prepare greater choices for collaboration, learner autonomy, creativity and experimentation including identify formation among instructors and students. Macedo and Morgado (2009) stated that virtual environments allow new pedagogical approaches that improve collaboration as well as both asynchronous and synchronous interaction between participants.

Students communicate synchronously and they can improve and enhance each other to gain a huge potential for interaction in real situation.

Wang *et al.* (2012) stated three principles for designing effective language learning activities (task-based, authenticity and collaboration). In addition, SL offers tools for participatory in the virtual social network, such the ability to create a new group or join an existing one (Lucia *et al.*, 2009).

Jarmon *et al.* (2009) mentioned that learning and experiences in SL might transfer to real life in different ways.

Thus, the researcher thinks that the outcome of this research may cover the above mention areas in the employment of Second Life to improve listening and speaking skills which receive great attention in teaching and learning domain.

The limitations of the study can be explained as following. The researcher samples were chosen from pre-intermediate Iranian students above seventeen living in Gonabad, Khorasan Razavi, Iran. The participants were just female students with the same levels of language proficiency who enrolled at the private language institution to participate in English classes.

In addition, the researcher chose those students who had familiarity with computer and Internet and also they used these technologies at home. Since the researcher did an experimental research, she wanted to be sure about using Second Life by students. Likewise, the researcher wants to know the effect of Second Life on listening and speaking skills of EFL learners. In addition to the small sample size, variables such as gender, age, and personal variables are not taken into account due to the limited number of the available participants.

Second Life is just one of many virtual environments that the researcher chose and perhaps the findings will not generalize to other virtual worlds. The learners participated in SL and they communicated through written chat and some physical actions such as raising their hands to ask questions, walking and sitting.

In the same line, the major purpose of this study was to investigate the effect of employing SL on pre-intermediate Iranian EFL learners' listening and speaking abilities.

It seemed to the researchers that in a country such as Iran there wasn't any specific study about the employment of Second Life for improving listening and speaking skills of students. Therefore, the researchers wanted to study whether using Second Life and interacting with each other and native people may help EFL learners to improve their listening and speaking skills

1.2. Research Questions

- Q1: Does the employment of Second Life have any significant effect on pre-intermediate Iranian EFL learners' speaking skill?
- Q2: Does the employment of Second Life have any significant effect on pre-intermediate Iranian EFL learners' listening skill?
- Q3: Does the employment of Second Life have any significant different effect on pre-intermediate Iranian EFL learners' speaking and listening skills?

1.3. Research Hypotheses

- H1: The employment of Second Life doesn't have any significant effect on pre- intermediate Iranian EFL learners' speaking skill.
- H2: The employment of Second Life doesn't have any significant effect on pre- intermediate Iranian EFL learners' listening skill.
- H3: The employment of Second Life doesn't have any significant different effect on pre intermediate Iranian EFL learners' speaking and listening skills.

2. THEORETICAL BACKGROUND AND CONCEPTS

2.1. Virtual Worlds in Education

A system for students to learn materials via the web is on-line virtual world which is accepted and used by different groups and for different purposes. [Dillenbourg et al. \(2002\)](#) stated that a virtual learning environment is a designed information and a social space. It is not only restricted to distance education but also enrich classroom activities.

According to [Van Raaij and Schepers \(2008\)](#) the success of a virtual learning environment depends on students acceptance and use of an e-learning system .Different studies investigated the influence of virtual environment on teaching and learning. For example, [Chou and Liu \(2005\)](#) stated that Web-based technology has an effective influence on learning and teaching.

According to [Livingstone et al. \(2008\)](#) online multi-user virtual worlds have been in existence since the late 1970s based on text descriptions of the world and the actors within it. Other researchers such as [Brown et al. \(2010\)](#) tried to show that virtual world provide a good situation to the use of computer mediated learning tools. [Dede \(1995\)](#) believed that 3D virtual environments could provide safe environments and students could learn by doing.

According to [Livingstone and Kemp \(2006\)](#) believed that SL had been used to support learning in a wide range of disciplines and needed better integration with current learning technologies. [Zhao \(2003\)](#) did a review study to achieve three goals: a) to evaluate the overall effectiveness of uses of technology in language education through meta-analysis,(b) to explore patterns of recent efforts in using technology to improve language learning, and (c) to identify effective ways to use technology in language education. [Felix \(2002\)](#) argued that one of the great strengths of web is the potential to participate students in creative information gap activities and real experiential learning in the form of meaningful, process oriented projects in authentic settings. [Fetscherin and Lattemann \(2008\)](#) stated that Virtual Worlds provide new ways of communication, collaboration, and cooperation over the Internet by applying 3D environments.

Dickey (2003) described 3D virtual worlds as constructivist learning environments for distance education.

2.2. The Virtual Environment of Second Life and Education

One of the virtual worlds that is very popular and useful among scholars is Second Life. Yee *et al.* (2007) explained that Second Life is the virtual world where its maker, Linden Labs, describes it as a 3D online persistent space created and evolved by its users. Every object in the world, including the avatars, the buildings, and other things are 3D objects rendered in real-time. Users communicate via written chat and pre-recorded animations.

Hew and Cheung (2010) believed that students like using virtual worlds because they enjoy the ability to move around freely in a 3-D space, to meet new people, and experience virtual field trips and simulated experiences.

Studies also suggest that the use of virtual worlds could help develop social interaction among participants through the use of avatars. Jarmon *et al.* (2009) studied the nature and process of learning in the computer- supported online 3D virtual world environment of Second Life.

Aydin (2013) in his research stated the advantages of SL as following: the utilization of SL as an EFL learning improves learner's motivation level, lowers their anxiety ,attracts their interest and makes a positive potential that enables self-regulation.

Wang *et al.* (2012) stated a model that may be used to design initial SL-based learning activities for their students. The goal of this design model was to overcome SL's technical limitations and its steep learning curve to help students accept SL gradually as a Foreign language learning environment.

Jauregi and Canto (2012) looked at pedagogical criteria for task development in SL and showed examples of tasks and presented preliminary results of the research being concluded on the added value of implementing these technologies within a sound pedagogical approach in language teaching.

Ma *et al.* (2009) reviewed the previous research of using online virtual worlds in teaching and learning, compared SL with traditional classroom sessions and the Blackboard. Henderson *et al.* (2009) studied one of the lesson conducted in SL which engaged students in a collaborative activity to identify and order food in Mandarin in a Chinese restaurant setting.

Lucia *et al.* (2009) suggested a virtual campus created using SL. The results demonstrated that the virtual environment successfully supports synchronous communication and social interaction.

Peterson (2012) studied the task-based interaction of English as a Foreign Language (EFL) learners in the 30 multiuser virtual environment (MUVE) Second Life. Lin *et al.* (2014) studied the integration of two task-based language teaching (TBLT) approaches in the 3D multiuser virtual environment (MUVE) Second Life.

Johnson *et al.* (2002) described the community building process of virtual learning teams as they formed, established roles and group norms, and addressed conflict. Ata and Orhan (2013) formed “Virtual Worlds Platform for Educators (VWPfE) in Second Life. They gathered there to share their experiences and studies to improve their skills and knowledge regarding education. Balçikanli (2012) believed that Second Life, a virtual 3D community, might create unique opportunities for language learners as a source of authentic interaction with target language speakers, a venue for language classes, and an autonomous study opportunity for learners.

Andreas *et al.* (2010) stated that SL can supplement and/or foster face to face interactions, it is a better approach in distance collaboration and communication. Mahon *et al.* (2010) created an educational simulation within Second Life (SL) to evaluate pre-service teachers (PSTs) in obtaining more experience for managing student behavior. Jennings and Collins (2007) emphasized on educational institutions appearance in SL virtual environment, the types of educational institutions spaces, and the types of activities conducted.

Olteanu *et al.* (2014) stated the main aspects that tutors and students met when working in the Second Life environment, during the on-line course “Designing Technology-Enhanced Learning”.

3. METHODOLOGY

3.1. Participants and Setting

The participants of this study were 50 girl students between 17-18 years old. All of them were at the same level of language proficiency. They were chosen randomly among the learners who enrolled in English classes of Meraje Andisheh English Institute in Gonabad, Iran, to learn English as a foreign language. Then, all of them were evaluated by participating in exams to check their ability in working with computer. According to their scores in these exams and also their accessibility to these technologies at home, they were divided in two groups (control group and experimental group)

3.2. Instrumentation

3.2.1. Placement Test

In order to homogenize the participants, a standard placement test was administered to 80 EFL learners and based on the scoring scale, 50 students in pre-intermediate level were selected as the subjects of the study.

3.2.2. Listening and Speaking Tests

Listening and speaking tests were used for evaluating the students' learning before and after the treatment (as pretest and posttest). Tests were taken from Interchange Third Edition/Passages, Second Edition Placement and Evaluation Package (Lesley *et al.*, 2008) and in the Interchange Third Edition Teacher's Edition (Richard, 2005). The validity and reliability of the tests were measured before the implementation of the test. The reliability of the listening and speaking tests was checked by piloting it in a smaller sample. Test retest reliability of speaking test was assessed by administering it to the same sample on two different occasions and calculating the correlation between two scores obtained. Utilizing Alpha Cronbach, the reliability was 0.92 for speaking test and 0.89 for listening test. The validity of tests was also checked by two TEFL university teachers.

The rubric scale of Cambridge university press which is presented at the end of Interchange Third Edition Teacher's Edition (Richard, 2005) were used to evaluate their listening and speaking skills.

3.3. Procedure

In this study, the 3D online virtual world of SL was used for interaction and communication among students. The aim of this study was to investigate the effect of using Second Life (an on line virtual world) on listening and speaking abilities of pre-intermediate Iranian EFL learners. To utilize the idea, the researcher did the following procedures: fifty girl students of pre intermediate level who came to an English institute class were chosen according to their English proficiency level and their accessibility to the internet and also their ability in working with computer, then they were divided in to two groups (experimental and control group). Before starting the class, those in the experimental group were familiarized with the virtual world of SL by participating in five training sessions. All students chose their avatars and the SL viewer was installed on their systems. The avatars' names were delivered to the teacher. The learners were taught how to use SL and how to interact and communicate with their friends and native people through written chat (nearby- chat and private chat) and some physical action such as (walking, sitting down, nodding, clapping, running, raising their hands). They were familiarized how they could be teleported to different places and also how to send emails. The control group also received some training about how to send emails and attach files to their emails.

Then, both groups took part in two different classes which the *Interchange book 1* of Richard (2005) was used as a source of teaching English.. The experimental group took part in 15 classes in eight weeks too, but after each class in a special time all the learners and the teacher logged in the 3D online virtual world of SL. Second Life is a good situation to use Task-based Language Teaching (TBLT) approach such as information gap to design teaching

activities in this environment. The teacher first teleported all students to a safe place which they could sit down and interact with each other or she gave them the address through private written chat or a note card so that all students gathered in a place to share their experiences. Then, she requested their ideas about the place to see whether it was adequate for them or not. After some warm up activities the teacher gave them the instruction and tasks related the educational class through nearby –chat or note cards. Special lesson plan was used by the teacher to teach the units. (Appendix A)

In experimental group students worked with each other in pair groups through private chat and then they shared their ideas through nearby chat by raising their hand so other students saw the learner and they had a virtual face to face interaction with others. This interaction lasted for 90 minutes two times a week in a specific time which was determined by the teacher. The experimental group also communicate with other people in SL every time they wanted. The control group communicated with teacher through sending and receiving extra tasks through email two times a week in a special time which was determined by the teacher then they had a review in each session. The control group took part in 15 educational classes in eight weeks.

The only difference between two groups was that the control group did not utilize Second Life virtual world.

At the end of the treatment both groups answered the same questions of listening and speaking tests of interchange 1 (Richard, 2005) which were taken at the beginning of term . Their answers were recorded and evaluated by three experienced teachers according to the rubric scale of Cambridge university Press (presented at the end of Interchange Third Edition Teacher's Edition, (Richard, 2005). The data from both groups were analyzed by SPSS Software version 21.

4. RESULTS AND DISCUSSION

4.1. Overview

In this part, the research questions and research hypotheses are considered through the statistical analyses of the achieved data of speaking and listening tests. The SPSS software (version 21) was applied to analyze the data.

4.2. Quantitative Results

4.2.1. Results of Speaking Test

To investigate the effect of Second Life on Iranian EFL Learners' speaking skill, the speaking tests was applied in both control and experimental groups. At first the normality results of speaking test was evaluated. The result of Shapiro-Wilk Normality test of speaking was 0/133. ($P > 0/5$)

Table 1 illustrates the comparison of the mean score of control and experimental groups in posttest after the treatment period.

Table-1. Descriptive Statistics of the Mean Scores of Speaking Scores of Control and Experimental Groups in Posttest

| | N | Mean | Std. Deviation | Std. Error Mean |
|--------------------|----|-------|----------------|-----------------|
| Control Group | 25 | 12.44 | 1.387 | .277 |
| Experimental Group | 25 | 14.68 | 1.215 | .243 |

To see whether there is a significant difference, an independent t-test was applied.

Table-2. Descriptive Statistics of Independent t-Test for the Comparison of the Mean Score of Speaking Scores of Control and Experimental Groups in Posttest

| | Levene's Test for Equality of Variances | | t-Test for Equality of Means | | | | | | |
|-----------------------------|---|------|------------------------------|--------|------|-----------------|-----------------------|---|--------|
| | F | Sig. | t | df | Sig. | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| Equal variances assumed | .984 | .326 | -6.074 | 48 | .000 | -2.240 | .369 | -2.981 | -1.499 |
| Equal variances not assumed | | | -6.074 | 47.186 | .000 | -2.240 | .369 | -2.982 | -1.498 |

The data in Table 2 show that there is a significant difference between control ($M=12.44$, $SD= 1.387$) and experimental groups ($M=14.68$, $SD=1.215$); $t(48) = -6.074$, $p<.0005$ (two-tailed). The magnitude of the difference in the means (mean difference= -2.24 , 95%CI= -2.981 to -1.499) was very large. (Eta squared = $.43$)

Table 3 shows the descriptive statistics of the Speaking Pre-Test and Post-Test in control group. This table represents the differences across the assessment period.

Table-3. Result of Paired-Samples T-test (Speaking Pre-test of Control Group& Speaking Post-test of Control Group)

| Paired | N | Mean | S. D | Mean Difference | t | df | Sig. (2-tailed) | 95% CI | |
|-----------------|----|-------|-------|-----------------|---------|----|-----------------|--------|-------|
| | | | | | | | | Lower | Upper |
| Speaking. Pre | 25 | 3.80 | 1.354 | -8.640 | -38.795 | 24 | .000 | -9.10 | -8.18 |
| Speaking. Post. | 25 | 12.44 | 1.387 | | | | | | |

* $p<.05$

Based on the data in Table 3, it is indicated that there is a statistically significant increase in Speaking test scores from Pre-test of control group ($M= 3.80$, $SD= 1.354$) to Post-test of control group ($M= 12.44$, $SD=1.387$), $t(24) = -38.795$, $p<.0005$ (two-tailed).

Table 4 represents the descriptive statistics of the Speaking Pre-Test and Post-Test in experimental group. This table shows the differences across the assessment period.

Table-4. Result of Paired-Samples T-test (Speaking Pre-test of Experimental Group& Speaking Post-test of Experimental Group)

| Paired | N | Mean | S. D | Mean Difference | t | df | Sig. (2-tailed) | 95% CI | |
|-----------------|----|-------|-------|-----------------|---------|----|-----------------|---------|--------|
| | | | | | | | | Lower | Upper |
| Speaking. Pre | 25 | 4.36 | 1.221 | -10.320 | -33.354 | 24 | .000 | -10.959 | -9.681 |
| Speaking. Post. | 25 | 14.68 | 1.215 | | | | | | |

* $p<.05$

The data in Table 4 show that there is a statistically significant increase in speaking test scores from Pre-test of experimental group ($M= 4.36$, $SD=1.221$) to Post-test of experimental group ($M= 14.68$, $SD= 1.215$), $t(24) = -33.354$, $p<.0005$ (two-tailed). This mean increase in speaking scores was 10.32 with a 95% confidence Interval of differences ranging from -10.959 to -9.681 . These results indicate that participants in the experimental group performed better in Speaking post-test compared to Speaking pre-test.

4.2.2. Results of the Listening Test

To investigate the effect of Second Life on Iranian EFL Learners’ listening skill, the listening tests were applied in both control and experimental groups. The result of Shapiro-Wilk Normality test of listening was 0/78. ($P > 0/5$)

Table 5 illustrates the comparison of the mean score of control and experimental groups in posttest after the treatment period.

Table-5. Descriptive Statistics of the Mean Scores of Listening Scores of Control and Experimental Groups in Posttest

| | N | Mean | Std. Deviation | Std. Error Mean |
|--------------------|----|-------|----------------|-----------------|
| Control Group | 25 | 11.16 | 1.434 | .287 |
| Experimental Group | 25 | 14.84 | 1.700 | .340 |

To see whether there is a significant difference, an independent t-test was applied.

Table-6. Descriptive Statistics of Independent t-Test for the Comparison of the Mean Score of Listening Scores of Control and Experimental Groups in Posttest

| | Levene's Test for Equality of Variances | | t-Test for Equality of Means | | | | | | |
|-----------------------------|---|------|------------------------------|--------|------|-----------------|-----------------------|---|--------|
| | F | Sig. | t | df | Sig. | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| Equal variances assumed | .515 | .476 | -8.273 | 48 | .000 | -3.68 | ..445 | -4.574 | -2.786 |
| Equal variances not assumed | | | -8.273 | 46.675 | .000 | -3.68 | .445 | -4.575 | -2.785 |

The data in Table 6 show that there is a significant difference between control ($M=11.16$, $SD= 1.434$) and experimental groups ($M=14.84$, $SD=1.700$); $t(48) = -8.273$, $p < .0005$ (two-tailed). The magnitude of the difference in the means (mean difference= -3.68 , $95\%CI= -4.575$ to -2.785) was very large. (Eta squared = $.58$)

Table 7 shows the descriptive statistics of the listening pre-test and post-test in control group. This table represents the differences across the assessment period.

Table-7. Result of Paired-Samples T-test (Listening Pre-test of Control Group& Listening Post-test of Control Group)

| Paired | N | Mean | S. D | Mean Difference | t | df | Sig. (2-tailed) | 95% CI | |
|------------------|----|-------|-------|-----------------|---------|----|-----------------|--------|--------|
| | | | | | | | | Lower | Upper |
| Listening. Pre | 25 | 4.56 | 1.583 | -6.60 | -13.663 | 24 | .000 | -7.597 | -5.603 |
| Listening. Post. | 25 | 11.16 | 1.434 | | | | | | |

* $p < .05$

Based on the data in Table 7, it is indicated that there is a statistically significant increase in listening test scores from pre-test of control group ($M= 4.56$, $SD= 1.583$) to post-test of control group ($M= 11.16$, $SD=1.434$), $t(24) = -13.663$, $p < .0005$ (two-tailed). The data shown in Table 7 indicate that participants in control group also outperformed in listening post-test compared to listening pre-test. This can be because of the natural improvement occurring by exposure to any instruction in course of time

Table 8 represents the descriptive statistics of the listening pre-test and post-test in experimental group. This table shows the differences across the assessment period.

Table-8. Result of Paired-Samples T-test (Listening Pre-test of Experimental Group& Listening Post-test of Experimental Group)

| Paired | N | Mean | S. D | Mean Difference | t | df | Sig. (2-tailed) | 95% CI | |
|------------------|----|-------|-------|-----------------|---------|----|-----------------|--------|--------|
| | | | | | | | | Lower | Upper |
| Listening. Pre | 25 | 6.16 | 2.014 | -8.680 | -19.789 | 24 | .000 | -9.585 | -7.775 |
| Listening. Post. | 25 | 14.84 | 1.700 | | | | | | |

*p<.05

The data in Table 8 show that there is a statistically significant increase in listening test scores from pre-test of experimental group ($M= 6.16$, $SD=2.014$) to Post-test of experimental group ($M= 14.84$, $SD= 1.70$), $t(24) = -19.789$, $p<.0005$ (two-tailed). This mean increase in listening scores was 8.680 with a 95% confidence Interval of differences ranging from -9.585 to -7.775. These results indicate that participants in experimental group performed better in listening post-test compared to listening pre-test. Table 9 represents the descriptive statistics of the differences between pretest and posttest scores of listening and speaking in experimental group.

Table-9. Result of Paired-Samples T-test (The differences between pretest & posttest scores of Listening & Speaking in experimental group)

| Paired | N | Mean | S. D | Mean Difference | t | df | Sig. (2-tailed) | 95% CI | |
|-----------------|----|-------|-------|-----------------|-------|----|-----------------|--------|-------|
| | | | | | | | | Lower | Upper |
| Difference of S | 25 | 10.32 | 1.547 | 1.64 | 4.105 | 24 | .000 | .815 | 2.464 |
| Difference of L | 25 | 8.68 | 2.193 | | | | | | |

*p<.05

The data in Table 9 show that there is a statistically significant increase in speaking test scores ($M= 10.32$, $SD=1.547$) to listening test score ($M= 8.68$, $SD= 2.193$), $t(24) = 4.105$, $p<.0005$ (two-tailed). This mean increase in speaking scores was 1.64 with a 95% Confidence Interval of differences ranging from .815 to 2.464. These results indicate that speaking skill of participants improved more than the listening skill of participants and Second Life had different significant effect on Speaking and Listening skills.

4.3. Summary of the Results

There was a significant mean difference between the pre-test and post –test scores of the listening and speaking tests. Working and practicing in the Second Life as an online virtual world attracted the students' attention and significantly affected their performance toward learning speaking and listening. The results also showed that Second Life had significant different effect on listening and speaking skills. Speaking scores of participants improved more than their listening scores. They received different effect from the independent variable.

4.4. Discussions

The aim of this study was to investigate the effect of Second Life as an online virtual world on EFL learners' speaking and listening skills. The researcher wanted to find out how working and practicing in SL could improve listening and speaking skills of EFL students and how different this enhancement happened. This quasi experimental study took place in authentic learning environment using special class group and one of the researchers was the teacher of both groups, thus she was in touch with the learners and she was able to control and monitor the whole process clearly. Thus, interpreting the whole process helped to obtain the detailed information. Findings of the study confirm that Second Life as an online virtual world had a significant effect on improving Iranian EFL learners' speaking and listening skills. This finding of the study is in harmony with the findings of previous studies such as [Ata and Orhan \(2013\)](#); ([Johnson et al., 2002](#)) and [Lucia et al. \(2009\)](#) believed that participants of SL can collaborate effectively and their positive outcomes showed SL is an environment which improve learning. The results of this

study also shows that SL had a significant different effect on listening and speaking skills. There are several reasons for the positive effects of Second Life on EFL learners' skills. Second Life could provide a platform for more informal communication and interaction between students and the teacher. It exposed the learners to new technology and increased students' engagement for online classes. Students in this environment had fun and enjoyed learning. Because of the similarity between SL environment and real world, the study enabled the learners to have a chance to use their knowledge (speaking and listening skills) practically and effectively in the real world. In this environment they learned how to communicate with each other, how to help and solve their problems and how to share their knowledge with their friends. Moreover the learners understood that a powerful listening skill could help them have an ability in speaking and communicating with others.

5. CONCLUSIONS

The findings of the analysis of quantitative data confirmed that Second Life as an online virtual world had a significant effect on improving pre-intermediate Iranian EFL learners' speaking and listening skills. There was a significant difference between the effect of Second life on listening and speaking skills and speaking skill improved more than listening skill. Second Life, a 3D online virtual world caused better performance of the learners after the treatment. Students enthusiastically took part in this environment, communicated with each other and shared their knowledge. The results of research outlines that Second Life acts as a unique factor to learning and teaching, this uniqueness is something special for Second Life and cannot be elicited from other technologies or methods. This study increases the awareness of educators on the availability of SL as an online virtual world for teaching and learning and suggests an innovative way to conduct educational activities in virtual worlds.

5.1. Pedagogical Implications

As an implication of the study, Second Life can be used as a learning tool for other language skills and language learning in general. According to the results of this study, it seems that Second Life is successful and effective in language learning specially speaking and listening skills, it would probably be successful and effective for learning and improving other skills such as reading and writing. Therefore, as another pedagogical implication of this study using Second Life as an online virtual world for learning other skills is suggested. It also can be used as a good place for Distance Education.

5.2. Suggestions for Further Research

It is better to do some researches about different ways that teachers can use to prepare this environment for teaching and learning. Also there should be some researches about how learners can use this environment for learning and how different universities can use this environment for their experiments.

REFERENCES

- Andreas, K., T. Tsiatsos, T. Terzidou and A. Pomportsis, 2010. Fostering collaborative learning in second life: Metaphors and affordances. *Computers & Education*, 55(2): 603-615.
- Ata, R. and S. Orhan, 2013. An implementation of virtual worlds platform for educators in second life. *Procedia-Social and Behavioral Sciences*, 83: 1027-1031.
- Aydin, S., 2013. Second life as a foreign language learning environment: A review of research. *Turkish Online Journal of Distance Education*, 14(1): 53-63.
- Balcikanli, C., 2012. Language learning in second life: American and Turkish students' experiences. *Turkish Online Journal of Distance Education*, 13(2): 131-146.

- Brown, E., M. Hobbs and M. Gordon, 2010. A virtual world environment for group work. *Novel Developments in Web-Based Learning Technologies: Tools for Modern Teaching: Tools for Modern Teaching*, 233.
- Chou, S.-W. and C.-H. Liu, 2005. Learning effectiveness in a web-based virtual learning environment: A learner control perspective. *Journal of Computer Assisted Learning*, 21(1): 65-76.
- Dede, C., 1995. The evolution of constructivist learning environments: Immersion in distributed, virtual worlds. *Educational Technology*, 35(5): 46-52.
- Dickey, M.D., 2003. Teaching in 3D: Pedagogical affordances and constraints of 3D virtual worlds for synchronous distance learning. *Distance Education*, 24(1): 105-121.
- Dillenbourg, P., D. Schneider and P. Synteta, 2002. Virtual learning environments. Paper Presented at the Proceedings of the 3rd Hellenic Conference'Information & Communication Technologies in Education.
- Felix, U., 2002. The web as a vehicle for constructivist approaches in language teaching. *ReCALL*, 14(1): 2-15.
- Fetscherin, M. and C. Lattemann, 2008. User acceptance of virtual worlds. *Journal of Electronic Commerce Research*, 9(3): 231-242.
- Henderson, M., H. Huang, S. Grant and L. Henderson, 2009. Language acquisition in second life: Improving self-efficacy beliefs. Available from <http://www.ascilite.org.au/conferences/auckland09/procs/henderson.pdf>.
- Hew, K.F. and W.S. Cheung, 2010. Use of three-dimensional (3-D) immersive virtual worlds in K-12 and higher education settings: A review of the research. *British Journal of Educational Rechnology*, 41(1): 33-55.
- Jarmon, L., T. Traphagan, M. Mayrath and A. Trivedi, 2009. Virtual world teaching, experiential learning, and assessment: An interdisciplinary communication course in second life. *Computers & Education*, 53(1): 169-182.
- Jauregi, K. and S. Canto, 2012. Enhancing meaningful oral interaction in second life. *Procedia-Social and Behavioral Sciences*, 34: 111-115.
- Jennings, N. and C. Collins, 2007. Virtual or virtually u: Educational institutions in second life. *International Journal of Social Sciences*, 2(3): 180-186.
- Johnson, S.D., C. Suriya, Y.S. Won, J.V. Berrett and J. La Fleur, 2002. Team development and group processes of virtual learning teams. *Computers & Education*, 39(4): 379-393.
- Lesley, T., C. Hansen and J. Zukowski, 2008. *Placement and evaluation package interchange third edition /passages*. 2nd Edn., Cambridge: Cambridge Pniversity Place. pp: 49-66.
- Lin, T., S. Wangb, S. Grantc, C. Chienb and Y. Lanb, 2014. Task-based teaching approaches of Chinese as a foreign language in second life through teachers perspectives. *Procedia Technology*, 13: 16-22.
- Livingstone, D. and E.J. Kemp, 2006. Massively multi-learner: Recent advances in 3D social environments. *Computing and Information Systems Journal*, 10(2): 1-5.
- Livingstone, D., J. Kemp and E. Edgar, 2008. From multi-user virtual environment to 3D virtual learning environment. *ALT-J: Research in Learning Technology*, 16(3): 139-150.
- Lucia, A.D., R. Francese, I. Passero and G. Tortora, 2009. Development and evaluation of a virtual campus on second life: The case of second DMI. *Computers & Education*, 52(1): 220-233.
- Ma, M., A. Oikonomou and H. Zheng, 2009. Second life as a learning and teaching environment for digital games education. Teoksessa M. Lombard et al.(Toim). *The International Society for Presence Research Proceedings*, Los Angeles, USA, 11-13.11.
- Macedo, A. and L. Morgado, 2009. Learning to teach in second life. Paper Presented at the Proceedings of EDEN Seventh Open Classroom Conference.
- Mahon, J., B. Bryant, B. Brown and M. Kim, 2010. Using second life to enhance classroom management practice in teacher education. *Educational Media International*, 4(2): 121-134.
- Olteanu, R.L., G. Gorghiu and A. Suduc, 2014. Working in the second life environment-a way for enhancing students collaboration. *Procedia-Social and Behavioral Sciences*, 141: 1089-1094.

- Peterson, M., 2012. EFL learner collaborative interaction in second life. *ReCALL*, 24(01): 20-39.
- Richard, J.C., 2005. *Interchange third edition teacher's edition*. Cambridge: Cambridge University Press, 1: 323-324.
- Richard, J.C., 2013. *Interchange 1. 4th Edn.*, Cambridge: Cambridge University Press. pp: 2-57.
- Van Raaij, E.M. and J.J. Schepers, 2008. Acceptance and use of a virtual learning environment in China. *Computers & Education*, 50(3): 838-852.
- Wang, F., J.K. Burton and J. Falls, 2012. A three-step model for designing initial second life-based foreign language learning activities. *Journal of Online Learning and Teaching*, 8(4): 324-333.
- Yee, N., J.N. Bailenson, M. Urbanek, F. Chang and D. Merget, 2007. The unbearable likeness of being digital: The persistence of nonverbal social norms in online virtual environments. *Cyber Psychology & Behavior*, 10(1): 115-121.
- Zhao, Y., 2003. Recent developments in technology and language learning: A literature review and meta-analysis. *CALICO Journal*, 21(1): 7-27.

Appendices

Appendix A: A sample of lesson plan

The interchange book (1) of Richard (2013) was used as a source of instruction for teaching English in the classes. The first half of the book was chosen to be taught in this period. Each unit, which has different parts such as speaking, grammar, pronunciation/speaking, writing and reading was taught and practiced by teacher through collaboration and cooperation with learners during two sessions. The main focus of teaching in each session was on speaking and listening activities. The learners were asked to listen to the conversation in the class. After that they saw the conversation in their books and tried to remember the main points in 3 minutes. They were asked to practice the conversation with their partners and also the teacher gave them a topic for speaking in the class which was related to the subject of the lesson. This process was the same for both control and experimental groups.

Then for practicing more, the experimental group logged in the Second Life environment after each class at home in a special time. The teacher asked students to say the content of speaking and listening activities that they learned in English class. In fact the teacher was as a facilitator. They practiced and reviewed the subjects through nearby chat and private chat. If they had some problems, they could ask and solve them collaboratively and cooperatively.

The control group was asked to send a summary of speaking and listening subjects through email after each English class. So the learners reviewed the contents again by themselves at home. In the next session, the teacher asked them again about the conversation and the subject they practiced before. At the end of 16 sessions, both groups (experimental and control) took part in the listening and speaking tests which were held in pre-test.

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of English Language and Literature Studies shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.