International Journal of Research in English Education

The Effect of Using Phonetic Websites on Iranian EFL Learners' Word Level Pronunciation

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Received: October 19, 2016 Accepted: November 14, 2016 Online Published: November 18, 2016

Abstract

Computer-assisted language learning (CALL) is reaching an up most position in the pedagogical field of English as a Second or Foreign Language (ESL/EFL). The present study was carried out to study the effect of using phonetic websites on Iranian EFL students' pronunciation and knowledge of phonemic symbols. Participants of the study included 30 EFL female pre-intermediate students studying in Kish Language School in Tonekabon. A pretest and posttest of phonemic symbols and pronunciation was given before and after the treatment to both experimental and control groups. The results of statistical analysis revealed that the learners' pronunciation developed better when they took part in web-based training course. On the other hand, the experimental group did not outperform the control group regarding the knowledge of phonemic symbols. This thesis concludes with some implications for teaching and directions for further research.

Keywords: phonemic symbols, EFL learners, pronunciation, web-based learning

1. Introduction

The increasing use of computers and a number of other technological devices have brought about sweeping changes in our lives and dramatically enhanced human's lives in different spheres, including higher education (Inoue, 2007). According to Peters (2010), language students are among the beneficiaries of recent advances in technology, especially those associated with computers and the Internet; millions of them utilize these technological marvels for their educational purposes.

Ghasemi, Hashemi, and Barani (2011) held the idea that learning via technology has many benefits. For example, through using internet, the learners can be provided current and up-to-date data and vast amount of information that can be retrieved easily and quickly. Computer, also, can serve a variety of uses for language teaching. It can be a tool for reading, writing, and doing researches, a stimulus for engaging students in authentic conversation and interaction, and a teacher practicing different drills and skills. More importantly, integration of computer-based materials into the educational environment transforms the students from passive recipients into active participants.

Internet has shown to positively affect the process of learning English as a foreign language (EFL) especially in pronunciation. Pronunciation is one of the most important skills in English Language Teaching. Correct pronunciation is very important because if speakers have very bad pronunciation, their speech will not be understandable to the listeners so the learners need instruction in the articulation of specific English sounds. The access to phonetic websites and teaching of phonemic symbols in these websites has paved the way for EFL learners to improve their pronunciation skills.

2. Review of Literature

Pronunciation is the act or manner of pronouncing words; utterance of speech, a way of speaking a word, especially a way that is accepted or generally understood, and a graphic representation of the way a word spoken, using phonetic symbols. Further Pronunciation definition taken from Oxford Dictionary states pronunciation is the way in which a

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language or a particular word or sound is spoken. Pronunciation has become a controversial issue in the field of English as a Second Language. In an ESL setting, the students must increase their English comprehension for the classroom and they also need to communicate and interact in English outside the class in various situations. Students need to understand and to be understood. Morley (1991) stated that it is essential to teach English pronunciation in ESL, EFL classroom, nevertheless, this important part of English language is ignored at many English classroom and universities around the world. The pronunciation teacher should be a good model to the students, otherwise; the students will imitate bad pronunciation and lead making mistakes. Teacher should produce the accurate sounds and their productions of speech to the students in order to make the students really understand about how correct pronunciation is produced.

Fraser (2000b) explains that being able to speak English includes a number of sub-skills, of which pronunciation is "by far the most important" (other sub-skills of speaking include vocabulary, grammar, and pragmatics). She argues that "with good pronunciation, a speaker is intelligible despite other errors; with poor pronunciation, a speaker can be very difficult to understand, despite accuracy in other areas." In discussing the importance of pronunciation, Murphy (1991) describes them as vital in providing the much needed learning experiences to develop accurate control over the sound system within a language.

Computer will modify the nature of learning by substituting the control of learning more in the hands of the learner in other words it is more learner-centered. Also Pennington (1996) argued that pronunciation is better trained through computer systems because learners' consciousness of their own spoken language errors does not create problems in their learning. The rapid growth of computer, a new technology in modern era, has caught the attention of all educators in different fields, especially language teachers. It is worth noting that many language teachers and learners use computer-based materials, attractive to and beneficial for learners, as a routine part of language learning opportunities (Chapelle, 2001).

Although some years ago there were different difficulties in applying technology-based tools in classes to help learners with their language study, today teachers who fail to draw upon technology in language teaching are likely to be considered behind the times (Chapelle, 2000). ICT programs provide so many novel opportunities for language learning (Doughty & Long, 2003; Tafazoli & Chirimbu, 2013a). Most students in different levels of education are dependent on teachers in the classrooms and there is not any opportunity for students to control their own learning. Smith (2004) believes that computer technology can provide the student with the means to control his or her own learning, to construct meaning and to evaluate and monitor his or her own performance.

3. Methodology

3.1 Participants

Primarily, sixty L2 learners participated in this study. They were female pre-intermediate level students studying in Kish Language School in Tonekabon. The major participants of this study were selected according to Oxford Placement Test to homogenize L2 learners in terms of general language proficiency level. At the end, by administrating the proficiency test of OPT, we selected thirty homogenous subjects that have scored at least one standard deviation below the mean and then assigned them to two groups randomly: one experimental and one control group.

3.2 Instruments

3.2.1 Oxford Placement Test (OPT)

The proficiency test of OPT was administered to select 30 homogeneous students. The test contained 60 questions.

3.2.2 Pretest

A pretest of phonemic symbols and pronunciation was given before the treatment to both experimental and control groups. Each test has 20 questions. The students were asked to answer the question of phonemic symbols in 10 minutes and they were supposed to write the phonetic transcription of underlined words. A pretest of pronunciation was also given in which the students were asked to read 20 words and was marked by two raters. The marks in both tests were out of 20.

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3.2.3 Posttest

A posttest of phonemic symbols and pronunciation was given after the treatment to both experimental and control groups. Each test has 20 questions. The students were asked to answer questions of phonemic symbols in 10 minutes and they were supposed to write the phonetic transcription of underlined words. A posttest of pronunciation was also given in which the students were asked to read words and was marked by two raters. The marks in both tests were out of 20.

3.3 Procedure

After administering the OPT test, a pronunciation test including the same words that were used in the teaching phase were given to the participants one by one. The pretest included 20 words. The participants were asked to have a look at the words for a few minutes then read them aloud. Their voices were recorded and evaluated for accuracy by two experienced English teachers. The focus was on the correct pronunciation of the target words and after that a pre-test of phonemic symbols containing 20 questions was given to learners to complete. Then, the first group (as experimental) took part in website-based teaching of pronunciation, but the second group did not (as control group). Again after 10 sessions of teaching and at the end of this training program the post-test was given to both experimental and control groups. The data collected from the pre-test and post-test of two groups were analyzed through paired sample t-test and independent sample t-test to find out how much this program had an impact on students' word level pronunciation and learning of phonemic symbols.

4. Methods of Analyzing Data

Statistical Package for Social Sciences (SPSS) was used for calculating the data. A number of paired sample t-test and independent sample t-test was used to answer the research questions. A pretest and posttest of pronunciation and phonemic symbols were given to students to answer and each of the tests was scored out of 20.

5. Results

A descriptive analysis of the data for the research question "Does using phonetic websites have any effect on Iranian EFL learners' word level pronunciation?" has been presented; then, the inferential analysis of the data has also been provided using tables and diagrams.

The descriptive analysis of this study for all hypotheses consists of a discussion of the mean, standard deviation and the standard error of measurement. Similarly, the inferential analysis of the data in this study consists of calculating the paired-sample t value between the pretest and the posttest of each group.

6. Descriptive Analysis of the Data

6.1 Findings for Experimental and Control Groups of the Study

The descriptive analysis of the data for different groups of the study has been summarized below. Table 1 summarizes the descriptive analysis of the data before web-based learning and after web-based learning scores for the experimental group:

Table 1. Descriptive analysis of the data for the experimental group

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pronunciation Before Web-based Teaching				
		14.600	15	2.585	0.667
	Pronunciation After Web-based Teaching	18.400	15	1.549	0.400

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As table 1 indicates, the mean for participants' pronunciation before web-based teaching is 14.600 ($\bar{X}$=14.600) while the mean for participants' after web-based teaching is 18.400 ($\bar{X}$=18.400). The lower standard deviation of experimental group indicates less variety among the scores from the mean. Finally, the amount of standard error is higher in the before-WB teaching group scores. Table 2 summarizes the descriptive analysis of the data between pretest and posttest of pronunciation scores for the control group:

Table 2. Descriptive analysis of the data for control group

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pronunciation Pretest	14.266	15	2.789	0.720
	Pronunciation Posttest	16.400	15	1.843	0.476

As table 2 indicates, the mean for the pretest is 14.266 ($\bar{X}$=14.266) while the mean for the posttest is 16.400 ($\bar{X}$=16.400). The higher standard deviation of pretest indicates more variety among the scores from the mean. Finally, the amount of standard error is lower in posttest group scores.

6.2 Inferential Analysis of the Data

The first hypothesis of this study targeted the extent to which Iranian EFL students' pronunciation could enhance as a result of taking part in web-based teaching course. The inferential analysis of the data for this hypothesis has been analyzed through paired-sample t test and independent-sample t test and summarized in the tables below. Table 3 summarizes the inferential analysis of the data of before-WB teaching and after-WB teaching scores for experimental group:

Table 3. Paired-sample t value for experimental group

		Paired Differences					
		Mean	Standard Deviation	Std. Error Mean	t	Df	Sig.(2-ailed)
Pair 1	Pronunciation Before WB Teaching _ After WB Teaching	3.933	3.432	0.868	**4.438**	14	.000

As table 3 indicates, the observed t value for students before and after WB teaching is 4.438 (tobs=4.438) which is much higher than the critical t value (tcrit=2.145 with the level of significance of 0.05 and degree of freedom of 14 df =14). This rejected the first null hypothesis of the study. In fact, Iranian EFL learners' pronunciation was affected by teaching pronunciation through phonetic websites. Table 4 summarizes the inferential analysis of the data of pretest and posttest scores for control group who did not take part in WB teaching courses:

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Table 4. Paired-sample t value for control group

		Paired Differences		
		t	df	Sig.(2-tailed)
Pair 1 Pretest	Posttest	**3.420**	14	.000

As table 4 indicates, the observed t value for control group is 3.420 (tobs= 3.420). By comparing this value and the critical t value (tcrit= 2.145 with the level of significance of 0.05 and degree of freedom of 14 df =14), we come to this conclusion that there is improvement in students' pronunciation ability between pretest and posttest scores. Table 5 summarizes the inferential analysis of the data of posttests for both groups:

Table 5. Independent sample test for posttest of pronunciation for both groups

	Leven's Test for Equality of Variance		**T-test for Equality of Mean**				
	F	Sig.	t	df	sig. (2- tailed)	Mean Difference	Std. Error Difference
Equal variance assumed	.093	.762	3.216	28	.003	2.000	.621
Equal variance not assumed			3.216	27.192	.003	2.000	.621

An independent samples t-test was conducted to compare the pronunciation between posttests of experimental and control groups. The sig. value for Levene's test for equality of variance was more than .05 which meant that equal variances were assumed. The value in the sig. (2-tailed) column was .003 which meant there was a significant difference in scores for experimental (M = 18.40, SD = 1.54) and control (M = 16.40, SD = 1.84), meaning that experimental group outperformed the control.

7. Discussion

The present study described the effect of using phonetic websites on Iranian EFL learners' word level pronunciation and learning of phonemic symbols at pre-intermediate level. For this reason, Grant's (1995) theoretical framework was followed by the researcher. According to Grant (1995), technology has been used in acquiring pronunciation has best-quality for sound giving the students the chances to look at articulatory movements to producing sounds (Grant, 1995). The hypothesis of the study was tested on a sample of 30 EFL learners at pre-intermediate level. Data analysis was conducted in a view of the research question guiding this study: (1) Does using phonetic websites have any effect on Iranian EFL learners' word level pronunciation?

Findings from this study indicated that integrating computer-based materials in a classroom had significant effect on the students' pronunciation skills. Teachers generally sacrifice teaching pronunciation in order to spend valuable class time on other areas of language so pronunciation practice is very unlikely to occur. Thus, it is important that the students themselves try more to overcome their pronunciation difficulties. Pronunciation can be improved by awareness and repetition of the sounds. If students do not have an opportunity to practice good pronunciation at the beginning of their learning, they may build their habits in the wrong way. Especially in the case of Iran that students are not exposed to English and the time used for English language instruction is very constrained and also teachers are

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not perfect and have their own pronunciation problems, using phonetic websites is very useful and enables the language learners to obtain precise and explicit information on pronunciation.

Moreover, the results seem to indicate that the students were able to see the correct way of pronouncing the letters through web-based learning and were able to articulate them in the best way. It can be said that learning via internet is an alternative way to learn English. Web-based technologies and powerful internet connections provide various new possibilities for the development of educational technology. Web-based learning is currently one of the major applications of the internet. It is one of the most exciting pedagogical resources in use today. It encompasses a significant, and unlimited amount of educational materials that remodels teaching methodology. It is a means to shift from traditional teacher-centered classroom to learner-oriented environment.

Generally, based on the results, using phonetic websites has a great effect on Iranian EFL learners' word level pronunciation and learning of phonemic symbols. Computer assisted language learning (CALL) is reaching an up most position in the pedagogical field of English as a Second or Foreign Language (ESL/EFL). Its powerful presence has fostered learner autonomy and a wide range of opportunities for authentic interaction in the target language (English) in computer-based conditions.

As a conclusion, teaching pronunciation through phonetic websites is effective because it can improve the pronunciation ability and intrinsic motivation of the students as well. Besides, Because of limited time, the teacher should teach pronunciation effectively or the goal of pronunciation teaching will not be achieved. One of several ways to teach pronunciation effectively is by using these websites. Technology is familiar thing for the students. They provide a good pronunciation model to the students. Moreover, websites can attract students' attention so the teacher will easily deliver the materials and it also gives students confidence so the students will believe in their abilities of what they can do both in the classroom and out of it. The students also learn the correct way of articulation individual sounds which leads to the correct pronunciation of words and sentences as well.

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