

The Impact of Phonetic Instruction on Iranian Students' Listening Ability Enhancement

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Abstract

The purpose of this study was to see if phonetic instruction followed by the learners' checking of their pronunciation by the use of phonemic transcription would enhance Iranian students' listening ability. Since random assignment was not possible, the nonequivalent group, pretest-posttest design was employed to study two classes of third grade high school students as control and experimental groups. Both groups were exposed to the same listening activities; however, only the experimental group received the treatment regarding the phonetic symbols and phonemic transcription. A 30-item listening test was developed by the researcher based on the BBC listening materials to measure students' listening ability. The reliability of the test was estimated 0.69 through KR-21 formula. The results of the independent samples t-test analysis from the posttest administration indicated that the experimental group who received phonetic instruction had a better performance than the control group who did not receive it. Thus, the findings suggest that phonetic instruction and learners' phonemic transcription can facilitate the process of listening enhancement.

Keywords: Phonetic instruction, phonemic transcription, pronunciation, listening

Introduction

Although human beings have developed a writing system, oral language is still the main channel of gaining information. However, listening seems to be an overlooked dimension in language acquisition in EFL contexts like Iran. According to some researchers (Jahangard, 2007; Hosseini 2007; Razmjo & Riazi, 2006), students' aural and oral skills are less emphasized in the Iranian prescribed EFL textbooks. They are not tested in the final exams during the three years of senior high school and one year of pre-university education. Teachers put much less, if any, emphasis on oral drills, pronunciation, listening, and speaking abilities than on reading, writing, grammar, and vocabulary.

Iranian students usually study the English language for seven years in Iranian high schools and pre-university centers, but very few of them leave the system with the ability to use it communicatively. Famous Iranian language testing and teaching specialists, such as Farhady, Jafarpoor, & Birjandi (1994), have already confirmed that even Iranian students at the university level are not able to use the English language for communicative purposes as they are expected to.

According to Hosseini (2007), oral English language teaching in most of the Iranian academic situations seems to be ineffective and impractical as a result of strong examination washback. Little attention is given to oral language in the final examinations. Almost all Iranian English teachers are aware of the fact that the instruction of oral English in the school system faces major problems. The dominating influence of the exams, which hardly pay any attention to oral skills and pronunciation, has contributed to a failure to produce students who can use the language well enough for purposes beyond the exam (Kamyab, 2008).

According to Ostovar Namaghi (2006), three forces control and steer teachers' work in the Iranian educational context. First, since teachers cannot choose a textbook which is in line with their students' needs, the input is controlled by the prescribed curriculum. Second, the output is controlled by

the mandated national testing scheme so that teachers cannot develop tests which have a positive backwash on teaching and learning. Third, since high score is culturally equal to higher achievement, the process of teaching and learning is controlled by the grade pressure from students, parents, and school principals. He argues that teachers are pure implementers of the prescribed initiatives and schemes surrounded by cultural constraints, which prevent them from using their own professional knowledge and experience. Many English conversation institutes and language teaching centers out of the formal educational system throughout the country are in operation. They owe their existence to the very weakness of spoken English instruction in the formal education system. Even in these institutes, practicing lots of listening via using extensive level-appropriate material is supposed to be the only method to improve students' listening ability.

According to Okita (1999), many English teachers in Japan still adhere to the pronunciation practice dominated during audiolingualism. Stevick (1982) argues that mimicry memorization activities are thoroughly unpleasant and purely mechanical leading to students' monotony. Scholars have suggested different techniques to help students improve their listening ability. Wilson (2003) refers to "discovery listening" in which teachers help students focus on their listening problems and their causes. Students are guided to see the differences between their reconstructed text and the original so that they can discover the reason for their listening problems. He strikes a balance between meaning and form by arguing that top-down processing (listening for gist) should not be used at the expense of bottom-up processing (sound and word recognition). Moreover, Dalton (1997) believes that if the English language sounds are not received clearly, the learners' mind converts them into the closest sounds in their native language.

In spite of the fact that the positive effect of phonetic instruction as a teaching method on students' listening ability has been reported by some researchers, little research has been carried out in this regard in the Iranian context. Similarly, in an attempt to provide an effective way for enhancing high school students' listening skill in Korea, Chung (2005) taught English pronunciation and found that it had a positive effect on their listening ability. Also, Shimamune & Smith (1995) conducted a study on the relationship

between pronunciation and listening discrimination in which Japanese students were taught to pronounce and discriminate English words that contain unfamiliar phonemic contrasts (e.g., rock and lock). The results of their research indicated an interaction between pronunciation and listening discrimination. Teaching pronunciation was found to be easier than teaching listening discrimination.

On the one hand, due to the washback effect of the exams, little attention has been given to the teaching of pronunciation and the development of effective strategies to address the problem and, on the other hand, many English phonemes do not exist in Persian. That is why Iranian students have difficulty in learning English pronunciation. Since the pronunciation clues in the orthographic system of the English language are rather unpredictable, phonemic transcription can describe the oral form of the words to reduce the confusion related to symbol-to-sound relations. According to Wells (1996), transcribing a word or an utterance in a language such as English, whose spelling is conspicuously irregular, illustrates a direct specification of its pronunciation and enables the language learner to obtain precise and explicit information on pronunciation from a dictionary. It is a good method to reinforce what the learner may have received imperfectly by ear. That is, it provides a good aid to correct misperceptions.

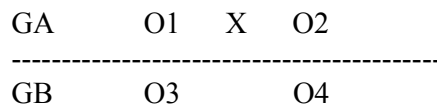
Not only has the instruction of pronunciation been the Cinderella of language teaching in Iran for many years, but also little research has been conducted in this regard. According to Brown (2007) and Nunan (2004), task-based language teaching has gained worldwide popularity. In line with this recent trend, the researcher developed a model in pronunciation teaching in which the students become aware of the phonological features of the English language. Investigating the impact of phonetic instruction and phonemic transcription on students' listening ability regardless of the washback effect of the exams so as to achieve the long-term goals of improving English language education in Iran is greatly needed. Thus, this study was carried out to fill this gap. As pointed out by Saito (2007), phonetic instruction would make students more aware of their pronunciations in EFL situations where English is contextually reduced and students do not have access to real-life communication with native speakers of English.

The purpose of this study was to investigate the following question: Does phonetic instruction enhance Iranian students' listening ability?

To achieve the purpose of this study, the following null hypothesis was formulated: Phonetic instruction has no significant effect on Iranian students' listening ability.

Research Design and Subjects

Subjects were third grade high school students in Bojnord, the capital city of Khorasane Shomali province in the north east of the country. Since random assignment was not possible, the nonequivalent group, pretest-posttest design was employed in this study. That is, subjects were tested in existing groups. The following diagram summarizes this quasi-experimental design in which the dotted line represents non-equivalent groups. Both groups are measured before and after treatment. Only one group receives the treatment. In this diagram GA and GB stand for experimental and control groups respectively. O1 and O3 stand for the tests before applying the treatment. O2 and O4 stand for the tests after the treatment and X stands for treatment.



The two intact groups included two third grade classes (A = experimental group and B = control group) in a National Organization for Development of Exceptional Talents (NODET) school where the researcher is an English teacher. The 20 subjects in group A (the experimental group) were given phonetic and phonological instruction along with listening training, while the 25 subjects in group B (the control group) were given listening training only.

Admission to NODET schools is based on a comprehensive nationwide entrance examination. Every year thousands of students apply to enter the schools, from which less than 5% are chosen for the 99 middle schools and 98 high-schools within the country. All applicants must have a minimum GPA of 19 (out of 20) for attending the entrance exam. The entrance exam gets very competitive in larger cities, especially in Tehran, in which 400 students are

accepted out of over 50,000 applicants.

<http://www.nodet.net/about/Paziresh.asp>

Instrument

The materials used in this study as treatment include the following chart which is a system of symbols for writing the sounds of English, a guide to these symbols along with videos to show how to pronounce each of the sounds, two exercises (schwa and sound-spelling), and five quizzes all of which developed by Alex Bellem who has a PhD in Linguistics (See BBC Website / BBC Learning English / Pronunciation Tips). At the time these videos were made in early 2008, Bellem was working as a Pronunciation Linguist in the BBC's Pronunciation Unit. Six items from each of the above-mentioned quizzes were used by the researcher to develop a 30-item listening test to measure students' listening ability before and after the treatment. For the pilot test, 23 subjects similar to those of this study responded to the items and helped the researcher establish the reliability of the test which was estimated 0.69 through KR-21 formula. The related information has been tabulated as follows:

$$R = \left(\frac{k}{k-1} \right) \left(1 - \frac{X(k-X)}{kS} \right) R = \left(\frac{30}{29} \right) \left(1 - \frac{14.60(30-14.60)}{(30)(22.97)} \right) = 0.697$$

where R = test reliability, k = number of items on the test, X = mean of the raw scores from the total test and S = variance of the raw test scores from the total test.

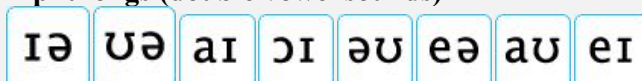
Short vowels



Long vowels



Diphthongs (double vowel sounds)



Voiceless consonants

p t tʃ k f θ s ʃ

Voiced consonants

b d dʒ g v ð z ʒ

Other consonants

m n ŋ h l r w j

Pretest, Training Sessions, and Posttest

After the listening pretest was administered to each group on the first day, the training session was held for 10 weeks from October 1, to December 15, 2009. Each of the one-hour classes met one day a week. The subjects in the experimental group received half an hour of instruction on pronunciation activities, such as phonetic symbols, schwa exercises, sound and spelling exercises, and phonemic transcription. Then, they listened to the related material audio for the next half hour. They were assigned to have a pocket dictionary each session. The phonemic symbols were taught within two sessions using the videos in the Pronunciation Tips section of the BBC site presented by Alex Bellem, a Pronunciation Linguist in the BBC's Pronunciation Unit.

The students were required to look up certain words and check their phonemic transcription in their dictionary in the following sessions. The researcher would explain the articulation of specific phonemes to the subjects and ask them to repeat after him. Then, the subjects were asked to pronounce the words using their transcription, and the researcher would try to help them if necessary. After dealing with all phonemic symbols, the final step was to listen to the audio again in order to enhance listening ability. The subjects in the control group only listened to the same audio exercises without spending any time on pronunciation activities for an hour. To see the significant effect of the treatment, the same 30-item test of listening was administered to both groups as the posttest at the end of the last session. The pretest and posttest were identical but the arrangement of the items was different in the posttest. Since there was an interval of two and a half months between the two tests, the posttest was less likely to be influenced by the subjects' memory.

Statistical analysis and results

The computer software Statistical Package of Social Sciences (SPSS v.15) was used to analyze the data in this study. Paired-samples t-test was used to see whether there was a statistically significant difference in the mean scores for Time 1 (prior to the intervention) and Time 2 (after the intervention) of the same group. Independent samples t-test was conducted to compare the possible differences between the means of the experimental and control groups based on the gain scores from the pretest and posttest. The following table indicates the summary of independent-samples t-tests vertically and paired-samples t-tests horizontally.

Table 1. The summary of independent- and paired-samples t-tests

Row = Independent-samples t-tests		Control Group	Experimental Group	Sig.
Pretest	Mean	16.36	16.45	P = 0.934
	Standard Deviation	3.51	3.73	
Posttest	Mean	21.72	25.80	P < 0.001
	Standard Deviation	3.58	2.80	
Posttest - Pretest	Mean	5.36	9.35	P < 0.001
	Standard Deviation	0.700	1.34	
Column = Paired - samples t-tests	Independent- & Paired-Samples t-test	P < 0.001	P < 0.001	Sig.

After transforming the data based on the results from paired samples-t-tests to neutralize the extraneous differences, an independent samples t-test was conducted to see whether there was a statistically significant difference in the posttest mean scores of the experimental and control groups. An alpha level of 0.05 was established before testing the significance. As recommended by Pallant (2007), the Levene's Test for Equality of Variances was checked. If the Levene's Test is significant ($p. < .05$), the two variances are significantly different. If it is not significant ($p. > .05$), the two variances are approximately equal. Here, since the Levene's test is significant ($p. = .01 < .05$), it can be assumed that the variances are not equal. Therefore, the assumption of equal variance has not been met. Next, the results of the t-test were checked. If the variances are approximately equal, the top line is read. If the variances are not equal, the bottom line of the t-test table, which refers to Equal variances not

assumed, is read. Based on the results of the Levene's test, it was known that the two groups had not equal variances, so the bottom line was read.

As indicated in Table 2, there is a significant difference between the gain scores for the experimental group ($M = 9.35$, $SD = 1.34$) and the gain scores for the control group ($M = 5.36$, $SD = .70$; $t (.27.07) = .12$, $p < .05$). This result suggests that the experimental group who received phonetic instruction had a better performance than the control group who received only listening instruction. Since there is a significant difference between the means of the two groups, the null hypothesis (phonetic instruction has no significant effect on Iranian students' listening ability) is rejected.

Table 2. The t-test for the experimental and control groups

Group	N	Mean	Std Dev	df	t	Sig.
Experimental	20	9.35	1.34	27.07	12.00	.000*
Control	25	5.36	.70			

*Sig. $p < .05$

Conclusion

The results of the independent samples t-test analysis from the posttest administration indicated that the experimental group who received phonetic instruction had a better performance than the control group who did not receive it. Thus, the findings suggest that phonetic instruction and learners' phonemic transcription of different words benefit the subjects in learning the sound system of the English language more accurately. Since this teaching method seems to have facilitated the process of listening enhancement, its application can be suggested to analytically reinforce the information that students may receive imperfectly by ear. However, due to the limitations of this study, the results should be interpreted cautiously. In fact, the application of phonetic instruction and phonemic transcriptions in the classroom as a teaching method is worth further research.

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