Research Article

THE EFFECT OF USING TWO APPROACHES OF TEACHING PRONUNCIATION (INTUITIVE-IMITATIVE AND ANALYTIC-LINGUISTIC) ON SPEAKING FLUENCY AMONG IRANIAN EFL LEARNERS

*Anis Behzadi 1 and Farzin Fahimniya 2

¹Department of English, Payam-e Noor University (PNU), Sirjan, Iran ²Institute for Humanities and Cultural Studies (IHCS), Tehran, Iran *Author for Correspondence

ABSTRACT

Although pronunciation is an essential element of oral communication, it seems to be the most neglected part of teaching in English as foreign language classes in Iran. It is mentioned that pronunciation is the Cinderella part of foreign language teaching. It is also showed that linguists and philologies have studied the other skills and sub-skills much longer than pronunciation. For this reason, other skills have been much better understood by most language teachers than pronunciation. The current study explores the effect of two different approaches of teaching pronunciation; namely, intuitive-imitative vs. analyticlinguistic on students speaking fluency in non-native environment with Iranian EFL learners. It is basically based upon experimental design. Accordingly, 60 intermediate Iranian EFL learners were chosen for this study. Their age range was between 12 and 28. They were randomly assigned into two experimental groups. Group A (intuitive-imitative) and group B (analytic-linguistic). For data collection, a pronunciation test was administered to both groups in a pretest-posttest design. The effect of subjects' age factor has been explored as a moderating variable in applying the two instructional approaches. To analyze the data t-test was used. Paired t-tests showed a statistically significant increase in the posttest pronunciation test scores and improving the learners' pronunciation ability. In addition, independent ttests indicated that the analytic-linguistic approach in teaching the pronunciation of English sounds was more advantageous and effective than intuitive-imitation one. With regard to age, it was proved that the intuitive-imitation approach was more fruitful and effective for the younger subjects; however, the analytic-linguistic approach was more effective for the older ones.

Keywords: Pronunciation, Intuitive-Imitative, Analytic-Linguistic, Speaking Fluency, EFL Learners

INTRODUCTION

The teaching of pronunciation has been at-odds with the teaching of grammar and vocabulary ever since it was first studied systematically shortly before the beginning of the twentieth century (Kelly, 1969). Celce-Murcia (2000) states the importance of pronunciation has been ignored until very recently. Most approaches and methods of teaching a second/foreign language (L2) place primary emphasis on reading and writing skills and secondary or little emphasis on oral skills. According to Celce-Murcia, pronunciation was overlooked in the syllabus, materials and classroom activities in English L2 classrooms. In the time that has passed since the acceptance of pronunciation as a contributing factor to language acquisition, it has come in and out of fashion as various progressive movements in language acquisition have prevailed. In fact, pronunciation is the production of sounds that we use to make meaning. It includes the particular sounds of a language (i.e., segments), aspects of speech beyond the level of the individual sounds, such as intonation, phrasing, stress, rhythm (i.e., suprasegmental aspects) and how the voice is projected, that is, voice quality (Yates and Zielinski, 2009). According to Schmitt (2002) pronunciation as a term used to capture all aspects of how we employ speech sounds for communication. As the sound system is an integral part of any language, there should be a place for pronunciation teaching in any language program. With regard to teaching pronunciation two general approaches have been developed: The Intuitive-Imitative Approach and The Analytic-Linguistic

Research Article

Approach. In The Intuitive-Imitative Approach the student listens to and imitates the rhythms and sounds of the target language by which it will lead to the development of an acceptable threshold of pronunciation without the intervention of any explicit information. The invention of the (recently much maligned) language lab and the audio-lingual method contributed to the support of this approach in the 60's, 70's and right up into the 80's. Indeed, many contemporary second language practitioners still hold to this view but research is needed to ascertain if their beliefs have any foundation. On the other hand, in the analytic-linguistic approach the phonetic alphabet and descriptions are used to show how to articulate words. It explicitly informs the learner and focuses attention on the sounds and rhythms of the target language. This approach is used to complement rather than to replace the intuitive-imitative approach. This approach recognizes the importance of an explicit intervention of pronunciation pedagogy in language acquisition. Developments in the fields of phonetics and phonology from the latter half of the century are drawn upon and often "watered down" for use in the language classroom. Pedagogical aids such as the phonemic chart, articulatory descriptions, explanations of the form and function of prosody and practical exercises such as minimal pair drills and rhythmic chants form the basis of an explicit program of accent modification. Interestingly, nowadays most pronunciation teachers tend to use elements of both major approaches. The way that they try to mix and match will depend on their students and specified goals. Interestingly enough, learning pronunciation develops the learners' abilities to comprehend spoken language. Even when the non-native speakers' vocabulary and grammar are excellent, if their pronunciation falls below a certain threshold level, they are unable to communicate effectively. Additionally, according to Fraser (2006), pronunciation is important to those who have integrative motivation since with native-like pronunciation they will not be marked as foreigners. With regard to two methods of pronunciation teaching, the current research is based upon the following research questions:

- 1-Do the intuitive-imitative and analytic-linguistic approach to pronunciation teaching has any effect on an EFL learner's pronunciation of sounds? If so, is there any significant difference between the effects of these two approaches in teaching pronunciation?
- 3. Does subjects' age make a significant difference in each approach (Group A and Group B)?

Literature Review

It seems that mispronunciation and bad intonation are fundamental problems in the speech of not only non-native students, but also the non-native teachers of English in underdeveloped countries. According to Brown (1991) the goal of teaching pronunciation to learners is not to make them sound like native speakers of English. With the exception of a few highly gifted and motivated individuals, such a goal is unrealistic. In fact, a more modest and realistic goal is to enable learners to surpass the threshold level so that their pronunciation will not detract from their ability to communicate. As English becomes an international language, the emphasis of pronunciation teaching will probably move away from trying to make learners sound like native speakers toward helping them become more intelligible in speaking with both native and non-native speakers of English. Interestingly, there are many factors influence the learning of pronunciation. Marianne Celce-Murcia *et al.*, (1999) classified most of those factors as follow in Teaching Pronunciation book, a course book and reference guide.

1-Age of the learner

- Young children can acquire good pronunciation more easily than adults.
- Children and adults learn pronunciation in different ways.
- Adults also have some advantages in learning pronunciation.
- 2-Exposure to the target language
- Greater exposure to the target language makes it easier to acquire good pronunciation.
- 3-Amount and type of prior pronunciation instruction
- If learners have had good pronunciation training before, this will help them. If they've had ineffective training or no training, they're at a disadvantage.
- 4-Aptitude, attitude, and motivation
- Natural ability: Some people may have a talent for pronunciation.

Research Article

- Personality factors: People who are more adaptable may have more success in pronunciation.
- •Language eg: Language, and especially pronunciation, is a powerful part of our concept of who we are. Sometimes it's scary to change that. Some learners are more flexible in being willing to change something so basic about themselves. We say they have high ego permeability.
- Motivation: In order to improve pronunciation, the learner must *want* to improve.
- 5-The role of the native language
- The learner's native language affects the learning of pronunciation.
- Sometimes this effect is bad, but sometimes it is good. There can be both positive and negative transfer.
- Unfamiliar sounds or sound combinations may be difficult to pronounce.
- An L1 sound may be substituted for an L2 sound.
- The phonological rules of L1 may be mistakenly applied to L2.
- Fossilization: Old habits are hard to break, but it can be done.

New directions in research: In teaching pronunciation, we shouldn't think only about individual sounds. Intonation, rhythm, and changes in connected speech are also important.

Voice quality-the overall characteristics of a speaker's voice, such as average pitch, tenseness of the muscles of the throat and vocal tract-or whether the speaker's voice sounds breathy, nasal, etc. -also have a strong influence on how a speaker's pronunciation sounds.

In an attempt to define teaching pronunciation, Lee (2008) defines it as part of the communicative approach and traditionally L2 teachers of pronunciation had used the phonetic alphabet and activities like transcription practice, diagnostic passages, recognition or discrimination tasks, and developmental approximation drills. Also, other popular methods were listening, imitating, visual aids, practice of vowel shifts related by affixation, and recordings of L2 learners' production. Some L2 learners benefited from these methods, but others did not learn the pronunciations of other languages. As mentioned above age of the learners is one of the most important elements of learning a second language, especially accent. The neurobiologically based hypotheses are probably the best-researched to date when it comes to quality. They are based on neurophysiological relations concerning the neural plasticity of the brain - a field into which we are gaining ever greater insight thanks to technological advances. According to Lenneberg (1967), who was among the first to advance hypotheses concerning the importance of age for language acquisition, the diminishing ability for language acquisition is related to how the various parts of the brain cooperate with the lateralization of the brain - i.e. with the gradual organization of work functions to the right and left hemisphere of the brain. And most of this organization is completed precisely around the age of 5-6. With regard to age and learning correct pronunciation and accent, Nunan (1999) suggests that the best time for students to learn a language in order to become as native-like in their pronunciation as possible is before the onset of puberty. This is because the first language has less influence on the students' L2 pronunciation at this stage. According to Senel (2006), children are supposed to be better in learning pronunciation abilities because it is quite difficult to teach language learners to acquire a nativelike language pronunciation beyond puberty. Also, Harmer (2007) states the advantage that younger language learners seem to have is that they have the ability to replicate pronunciation well, but older learners of a second language are not ashamed of their L1 being apparent in their second language since language is a part of their culture. Larsen-Freeman (1997) clarified some points about history of teaching pronunciation which are classified in table 1.

A number of researchers have inspired by strong belief in pronunciation enhancement through instruction. There are several researchers who have investigated the effect of pronunciation instruction on the segmental features (vowels and consonant) of language while many researchers (e.g., Champagne-Muzar, et al., 1993; Derwing et al., 1998; Hall, 1997) have focused on teaching suprasegmental features of language, such as stress, intonation, and rhythm-the musical aspects of pronunciation. Henning (1964) explored the effect of discrimination training and pronunciation practice on French sounds. Thus, it was concluded that the subjects who received discrimination training without pronunciation practice could pronounce the sounds of French more accurately than the subjects who received the pronunciation practice without discrimination training.

Research Article

Table 1: A Historical Review of Pronunciation in L2 Teaching

Years	Approach	Definition
1800s	Direct Method	Teachers provided L learners with a model for native-like speech. By
and		listening and then imitating the modeler, L2 learners improved their
1900s		pronunciation.
1940s-	Audio-Lingual Method	Pronunciation was taught explicitly from start, and L2 learners imitated
1950s	in the US and Oral	or repeated after their teacher or a recording model.
	Approach in the UK	
1960s	Cognitive Approach	This de-emphasized pronunciation in favor of grammar and vocabulary
1970s	Silent Way	L2 learners focused on the sound system without having to learn a
		phonetic alphabet. Attention was on the accuracy of sounds and
		structures of the L2 from the outset.
	Community Language	The pronunciation syllabus was primarily student-initiated and
	Learning	designed. The approach was imitative.
Mid-late	Communicative	The ultimate goal was communication. Teaching pronunciation was
1970s	Approach	urgent and it was necessary in oral communication. Techniques to teach
(1980s-		pronunciation were listening and imitating, phonetic training, minimal
today)		pair drill, and so on.
20th	Grammar Translation	Oral communication was not the primary goal of L2 instruction.
century	and Reading-Based	Therefore, little attention was given to speaking and almost none to
	Approaches	pronunciation.
	Natura- Total Physical	L2 learners began to speak when they were ready. L2 teachers were
	listic Response	tolerant of L2 learners' errors.
	Methods Natural	The initial focus on listening without pressure to speak gave L2 learners
	Approach	opportunity to internalize sounds.
Today	New Directions	The use of fluency-building activities, accuracy-oriented exercises, and
		adaptation of authentic materials is dominant.

A careful examination of Henning's investigation proves that the pronunciation practice was not a scientific and systematic training. Interestingly, Catford and Pisoni (1970) investigated auditory versus articulatory training in exotic sounds. Two groups of English speakers received either auditory or articulatory instruction in learning to produce exotic sounds including vowels and consonants. In contrast to Henning's findings, the results of production and discrimination tests in their study indicated a striking superiority for the English speakers who received systematic training in the production of sounds as opposed to those who received only discrimination training in listening to foreign sounds. Therefore, the teachers' scientific knowledge of articulatory phonetics was shown to be successful in leading students to the correct pronunciation and discrimination of foreign sounds. Ruhmke-Ramos and Delatorre (2011) in a recent study investigated the effects of training and training joined with instruction on the perception of the interdental fricatives— $[\theta]$ and $[\delta]$ —by Brazilian learners of EFL in a classroom setting. The choice for the interdental fricatives was done since these two sounds have been found to be difficult for Brazilian Portuguese speakers. The results indicated that participants in instruction training group improved their performance from pretest to posttest more than participants in training group, despite the lack of statistical significance. The researchers concluded that pronunciation teaching should be encouraged in classrooms.

MATERIALS AND METHODS

Participants

The study was conducted on a sample of 60 Iranian EFL students from different language institutes in Sirjan, Iran. The subjects' age range was between 12 to 28. All the participants were native speakers of Persian and were studying English at the intermediate level. Participants were selected randomly from a larger sample of 152 EFL learners. The participants had not taken any course on learning pronunciation before and did not have any history of speech impairment or hearing disorders.

Research Article

Procedures

This study was conducted on a sample of 60 Iranian EFL learners who were learning English in different language institutes in Sirjan, Iran. The students level was intermediate and their age rang was between 12 to 28. The reason why intermediate-level learners were selected was EFL learners' perceived needs for pronunciation improvement at the lower level of language proficiency. At first a proficiency placement test was conducted to select appropriate student at the same level. Then, subjects were randomly divided into two groups to receive the treatments of the study. Group A received the instruction according to the intuitive-imitative approach and Group B received the instruction according to the analytic-linguistic approach to teaching pronunciation. After that, a test of pronunciation was presented to measure participants' pronunciation ability before and after the instructional input of the study. The test consisted of 40 items. The list of items consisted of the most frequently used words such as about, wind, big, clean, thin, that, get, here and play selected from the participants' English language teaching materials and some of them from the student's book. All the students' voice was recorded for later evaluation, if necessary. Every true pronounced item had one mark. Then, the pronunciation test was used as a pre-test in order to investigate the participants' pronunciation ability. The participants were asked to pronounce the words presented to them. This test was used as the post-test as well. A brief articulatory descriptions of some English sounds as they were chosen to be used in this study is showed in the following table. These sounds are intentionally selected because they don't exist in Persian.

Table 2: Brief Articulatory Descriptions of some English consonants, vowels and diphthongs

1 abit 2	2. Driej Ariiculuoi	y Descriptions of some English consonants, vowers and alphinongs
Sound	Example	Articulatory Descriptions
W	weak, while, what	The tongue is placed between the teeth or inside of the teeth, with the tip touching the
		inside of the lower front teeth and the blade touching inside the upper teeth. The air
		escapes through gaps between the tongue and the teeth.
θ	three, tooth, think	It is like θ , but vocal folds vibrate and muscles of vocal tract are less tense.
ð	that, those, they	The back of the tongue is raised and lips are rounded. It is like a quick vowel.
ŋ	sang, sink, long	The back of the tongue is raised against the soft palate. Closure takes place and air
•		escapes through the nose.
3:	her, bird, shirt	The center of the tongue is between the half-close and half-open positions. Lips are
		relaxed, and neutrally spread.
Э	about, above,	Tongue is moved backwards toward the center of the mouth. What you wind up
	abroad	saying is likely to be something close to a schwa. The reduced vowel tends to be not
		only very short, but also very unclear, producing an obscure sound.
σ	put, foot, book	It pronounce while the lips are only moderately rounded.
ąσ	go, phone, home	The vowel position for the beginning of this is the same as for the "schwa" vowel a
		as found in the first syllable of the word "about". The lips may be slightly rounded in
		anticipation of the glide toward o , for which there is quite noticeable lip-rounding.

RESULTS AND DISCUSSION

Table 3: Levene's Test on the Pre-test Scores of Groups A and B

		Levene's Test for Equality of Variances	
	F		Sig.
Equal variances assumed	0.142		0.554

Table 4: T-Test on the Pre-test Scores of Groups A and B

		T-test for Equality of I	Means	
	T	Df		Sig.
Equal variances assumed	0.351	61		0.81
Equal variances not assumed	12.58	81.4	0.000	
T: T-rest Df: Degree of	f freedom	Sig: Significance		

The result of pre-test in group A and B are classified in table 3 and table 4. In order to have a basic frame of data analysis before starting teaching different method of teaching in two groups, the learners' performances on the pretests were analyzed in the group A and B. Therefore, it was statistically proved the homogeneous

Research Article

nature of the pretest scores. In other words, it can be concluded that the learners in both groups did not show any difference in their primary performance in the pretests. Accordingly, the reliability and homogeneity of two groups were proved.

Table 5: Levene's Test on the Post-test Scores of Groups A and B

		Levene's Test for Equality of Variances	
	\mathbf{F}		Sig.
Equal variances assumed	4.122		0.098
Equal variances not assumed	-		-

Table 6: T-Test on the Post-test Scores of Groups A and B

	T-test for Equality of Means			
	T	Df	Sig.	
Equal variances assumed	70.22	21	0.00	
Equal variances not assumed	71.25	21	0.00	

To evaluate the effect of instruction on the learners' pronunciation performance a paired-sample t-test was conducted. Therefore, the researchers were intended to see the effect of two methods of teaching pronunciation on students' pronunciation performance. To achieve this goal, an independent t-test was run to compare the means of group A and B. According to table 5 and 6, p value is 0.00(P < 0.5). Therefore, the equality between the two groups was rejected after post-test. It can be concluded that different methods of teaching pronunciation had different effect on learning pronunciation.

Table 7: Pretest and Posttest Pronunciation Scores in Group A and B (t-test)

				`	,
	Mean	Sd	T	Df	Sig. (2- tailed)
Pretest-Posttest Group A	63.16	5.25	35.14	22	0.00
Pretest-Posttest Group B	71.10	4.25	39.17	22	0.00

After treatment sessions an independent t-test was conducted on the pronunciation post-test scores of two groups. The exact results are classified in table 5 and 6. According to these tables, the variances of the differences in the mean scores were equal. Therefore, equal variances were assumed for the t-test analysis. Interesting enough, there was a significant difference in the scores of the group A and group B. To be specific, group A mean score was 63.16 and standard deviation was (SD = 5.25). However in group B the mean score was 71.10 and standard deviation was (SD = 4.25). All in all, as these data showed, the subjects in group B (analytic-linguistic) outperformed the subjects in group A(intuitive-imitative).

Table 8: T-Test and different Age Groups

Table 0. I I c	ot and anici cit	rige Groups				
Group A/B	Age	Mean	Df	t	Sig.	
Group A	12-17	69.23	4.75	22	0.005	
	17-28	63.12				
Group B	12-17	75.05	4.47	22	0.006	
	17-28	80.33				

To investigate the role of age in learning pronunciation in different methods of teaching the independent t-test was run on the subjects' post test scores. Some researchers believe that to achieve near native like pronunciation in the new language after the age of 13 or 14 is so hard and demanding, no matter how motivated a person is or how favorable his or her access is.

According to the result of the above charts, the mean score of students in group A between the age range of 12-17 is M=69.23, on the other hand, the mean score of students in group (B) with the age range of 17-28 was M=63.12. Therefore, it can be concluded that, the students who were younger could learn the

Research Article

correct pronunciation better than older ones. However in the group (B), the mean score of subjects with the age range of 12-17 was M=75.05, but the mean score of the students with the age range of 17-28 was M=80.33. It can be concluded that the older subjects were outperformed younger ones in group B.

Conclusion

The results indicate that there is a significant difference between the participants performance after the instruction. Having acceptable and beautiful pronunciation is not only easily accomplished by all learners of a foreign language but also it is changed to be a bothersome problem for them. Because of the importance of it, especially in nonnative atmosphere, careful attention should be directed toward pronunciation teaching and learning. Despite reluctance displayed by some language teachers, learners place a high value on instruction in pronunciation, as reported in some studies, pointing to a contradiction between teachers' and the learners' views on pronunciation teaching (Edwards, 1992, cited in Barrera Pardo, 2004; Madden and Moore, 1997; Vitanova and Miller, 2002). With regard to teaching pronunciation, not all teaching methods and strategies of language teachers are equally effective for L2 learners. According to Derwing and Munro (1998) pronunciation is a multifaceted experience affected by personal, social, and psychological variables, which make its learning more complicated and complex. Because of these elements, the age of learners, as a personal factor has had very vital role in finding an effective way of teaching pronunciation. In this study the most important element was based upon the effectiveness of teaching pronunciation. However, the personal differences were kept in mind in order to create a more effective approach in pronunciation teaching.

With regards to the approaches, intuitive and analytic approaches are among the effective approaches that can lead to some sort of change in the earlier state of knowledge about pronunciation. The intuitiveimitative approach, that was taught and used in Group A, smoothed the way to improve the participants' pronunciation of sounds including consonants, pure vowels, which seem to be often difficult to learn and pronounce perfectly for Persian speakers who are learning English as a foreign language. On the other hand, the influence of explicit interventions like describing articulatory complexities such as place and manner of articulation, which is used in Group B, showed a significant improvement in the EFL learners' pronunciation performance. Additionally, the results of this study agree with Ruhmke-Ramos and Delatore (2011), who found out that training combined with instruction tend to be a more effective tool to improve learners' perception than training alone in pronunciation classes. With regard to the older participants, analytic-linguistic approach was more effective, as showed by a higher mean of their performance. Interestingly, they can favor the linguistic-based method of instruction. In other words, this method helped them to establish new phonetic boundaries. The higher state of knowledge in this group (B) paves the ground for positive reactions to this specific analytic training approach. Actually, the results of the current study are, to some extent, in line with what Jenkins (2002) claims to be important to teach pronunciation. By an advanced understanding of an L2, Jenkins (2002) agrees that explicit instruction in pronunciation is essential in an L2 curriculum, as it is found in this study that the analytic-linguistic approach works better toward teaching, especially with older students.

All in all, it could be optimal and advantageous for L2 practitioners and teachers to clearly specify either intuitive-imitative or analytic-linguistic approaches for young learners' and adult learners' classes. Because it can surely guarantee the rates of achievement and success in the learners' pronunciation performance.

Pedagogical implications

The most important aim and challenge of every research is the capability of putting the findings of research into practice. It is up to the researchers, textbook writers, and in service programs for teachers to inform foreign language teachers of the recent findings of the researchers in the field teaching and learning. Otherwise, the findings of the research are of little value. This research can have some pedagogical implications not only for teachers but also for learners. According to the results of this study pronunciation ability can be improved through intervention training instructions, highlighting the inclusion of formal pronunciation teaching in the L2 curriculum. It was revealed that age is an important

Research Article

factor in learning English pronunciation; therefore, the method of teaching pronunciation should be different in classes with different age range. Although some experienced L2 teachers may know intuitively how to teach pronunciation, most may need some formal training in how to teach pronunciation analytically and successfully so that L2 learners can benefit more. Interestingly, the combination of two approaches can be the most effective method of teaching in order to approach to native like pronunciation.

ACKNOWLEGEMENT

We would like to thank all the participants of this study for their time and cooperation.

REFERENCES

Brown A (1991). Teaching English Pronunciation: A Book of Readings (London: Routledge).

Catford J and Pisoni D (1970). Auditory vs. articulatory training in exotic sounds. *Modern Language Journal* **54** 477–481.

Celce-Murcia M (2000). Teaching pronunciation as communication. In: *Current Perspectives on Pronunciation* edited by J. Morley (Washington DC: TESOL) 105.

Celce-Murcia M, Brinton D, Goodwin J and Griner B (1999). *Teaching Pronunciation: A Course Book and Reference Guide*, Second Edition (Oxford University Press).

Champagne-Muzar C, Schneiderman EI and Bourdages JS (1993). Second language accent: The role of the pedagogical environment. *International Review of Applied Linguistics* 31 143–160.

Derwing TM and Munro MJ (1997). Accent, intelligibility, and comprehensibility: Evidence from four L1s. *Studies in Second Language Acquisition* **19** 1-16.

Derwing TM, Munro MJ and Wiebe G (1998). Pronunciation instruction for "fossilized" learners: Can it help? *Applied Language Learning* **8** 217-235.

Enkins J (2002). A social-linguistically based, empirically researched pronunciation syllabus for English as an international language. *Applied Linguistics* 23(1) 83–103.

Fraser H (2006). Helping teachers help students with pronunciation: A cognitive approach. *Prospect: An Australian Journal of TESOL* 21 80-94.

Harmer J (2001). The Practice of English Language Teaching, 3rd edition (China: Pearson Education Limited).

Henning WA (1964). Phoneme Discrimination Training and Student Self-Evaluation in the Teaching of French Pronunciation. Unpublished doctoral dissertation, Indiana University, Indiana.

Kelly G (1969). 25 Centuries of Language Teaching (Rowley, MA: Newbury House).

Kelly G (2000). How to Teach Pronunciation (Malaysia: Pearson Education Limited).

Larsen-Freeman Diane (1997). Chaos/complexity science and second language acquisition. *Applied Linguistics* 18(2) 141-65.

Lee ST (2008). Teaching Pronunciation of English Using Computer Assisted Learning Software: An Active Research Study in an Institute of Technology in Taiwan. Unpublished masters' thesis, Australian Catholic University, Victoria, Australia.

Lenneberg EH (1967). The Biological Foundation of Language (New York: John Wiley and Sons).

Nunan D (1999). Second Language Teaching and Learning (Boston: Thomson Publishing).

Ruhmke-Ramos NK and Delatorre R (2011). The effects of training and instruction on the perception of the English interdental fricatives by Brazilian EFL learners. Available: http://www.abralin.org/abralin11_cdrom/artigos/Nadia_Ramos.pdf [Accessed 6 June 2011].

Schmitt N (2002). An Introduction to Applied Linguistics (London: Oxford University Press).

Senel M (2006). Suggestions for beautifying the pronunciation of EFL learners in 127 Turkey. *Journal of Language and Linguistic Studies* **2**(1) 111-125.

Yates L and Zielinski B (2009). Give it a go: Teaching Pronunciation to Adults (Sydney: The AMEP Research Centre).