การศึกษาการออกเสียงภาษาอังกฤษที่คลาดเคลื่อนและปัจจัยที่ส่งผลต่อการออกเสียง
ของนักศึกษาไทยระดับปริญญาตรี
The Investigation of English Pronunciation Errors and Factors Affecting English Pronunciation of Thai Undergraduate Students

วิชุรา วินัยธรรม [*]

Wichura Winaitham

สุขสรรพ์ ศุภเศรษฐเสรี [**]

Suksan Suppasetseree

บทคัดย่อ

      การจัดการเรียนการสอนภาษาอังกฤษในประเทศไทยได้รับการพัฒนามาโดยตลอด นับตั้งแต่ภาษาอังกฤษเริ่มมีบทบาทมากยิ่งขึ้นต่อการดำเนินชีวิตของคนไทย แต่ประสิทธิภาพการใช้ภาษาอังกฤษของนักเรียนไทยยังไม่เป็นไปตามที่คาดหวังไว้ นอกจากนี้มีงานวิจัยที่ผ่านมาเปิดเผยว่า นักศึกษาไทยประสบปัญหาด้านการฟังและการออกเสียงภาษาอังกฤษในระดับมาก งานวิจัยในครั้งนี้จึงมีวัตถุประสงค์เพื่อศึกษาการออกเสียงภาษาอังกฤษที่คลาดเคลื่อนและปัจจัยที่ส่งผลต่อการออกเสียงภาษาอังกฤษของนักศึกษาไทยระดับปริญญาตรี กลุ่มตัวอย่าง เป็นนักศึกษาชั้นปีที่ 1 มหาวิทยาลัยราชภัฏกำแพงเพชร ภาคเรียนที่ 2/2553 จำนวน 30 คน เครื่องมือวิจัยประกอบด้วย แบบทดสอบการออกเสียงภาษาอังกฤษ แบบสอบถาม และแบบสัมภาษณ์แบบกึ่งโครงสร้าง การวิเคราะห์ข้อมูลเชิงปริมาณ ใช้สถิติพรรณนา และการวิเคราะห์ข้อมูลเชิงคุณภาพ ใช้การวิเคราะห์เนื้อหา ผลการวิจัยพบว่า 1) นักศึกษาออกเสียงเน้นหนักคลาดเคลื่อนมากที่สุด โดยมักจะไม่ลงเสียงเน้นหนัก หรือลงเสียงเน้นหนักผิดตำแหน่ง มีการออกเสียงสระคลาดเคลื่อนปานกลาง โดยเฉพาะสระเสียงยาวและสระเสียงประสม และมีการออกเสียงพยัญชนะคลาดเคลื่อนน้อย 2) ปัจจัยที่ส่งผลต่อการออกเสียงภาษาอังกฤษคลาดเคลื่อนดังกล่าว ได้แก่ นักศึกษาไทยขาดความรู้พื้นฐานด้านการออกเสียงภาษาอังกฤษ มีการออกเสียงภาษาอังกฤษตามวรรณยุกต์และทำนองเสียงภาษาไทย ขาดความตั้งใจและความเคยชินในการพูดโดยทำนองเสียงภาษาอังกฤษ ขาดการใช้ภาษาอังกฤษในชีวิตประจำวัน และมีความวิตกกังวลมากไปต่อการใช้ภาษาอังกฤษให้ถูกต้องเมื่อต้องสื่อสารด้วยวาจา

คำสำคัญ: การออกเสียงภาษาอังกฤษที่คลาดเคลื่อน / ปัจจัยที่ส่งผลต่อการออกเสียงที่คลาดเคลื่อน
            นักศึกษาไทยระดับปริญญาตรี

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[*] นักศึกษาปริญญาปรัชญาดุษฎีบัณฑิต สาขาวิชาภาษาอังกฤษศึกษา สำนักวิชาเทคโนโลยีสังคม มหาวิทยาลัยเทคโนโลยีสุรนารี

[**] อาจารย์ที่ปรึกษา อาจารย์ ดร. สาขาวิชาภาษาต่างประเทศ สำนักวิชาเทคโนโลยีสังคม มหาวิทยาลัยเทคโนโลยีสุรนารี

Abstract

English learning and teaching in Thailand has been implemented since an increasing use of English impacted Thai people's lives. Still, Thai students' proficiency in English has not improved as was expected. Previous studies reveal that Thai EFL learners encounter a number of difficulties in listening and pronunciation. The purposes of this study were to investigate the English pronunciation errors of Thai undergraduate students and to explore the factors affecting their pronunciation errors. Thirty subjects were purposively selected from freshmen at Kamphaeng Phet Rajabhat University in semester 2/2010. The research instruments included English pronunciation testing tests, a questionnaire and a semi-structured interview. Descriptive statistics were used to analyse the quantitative data and a content analysis was used for the qualitative data. It was found that; 1) Thai undergraduate students pronounced words with very high error in stress and stress placement, with moderate error in long vowels and diphthongs and with low error in consonant sounds; 2) factors affecting pronunciation errors included Thai students' lack of basic knowledge of English pronunciation, the use of Thai tones and intonation for English pronunciation, lack of intention, unfamiliarity with English intonation, infrequent use of English on a daily basis and anxiety about making mistakes in oral communication.

Keywords: English pronunciation errors / factors affecting pronunciation errors / Thai undergraduate students

Introduction

English learning and teaching in Thailand has been implemented since an increasing use of English impacted Thai people's lives, served as the world's link, generated demands of the country developments, including the preparation for ASEAN community in which English will be used as an inter-language of the community (Office of the Higher Education Commission, 2009; Office of the National Economic and Social Development Board, 2011). Still, Thai students' proficiency in English has not improved as was expected. According to the average O-Net (Ordinary National Educational Test) score of English during 2007-2009, the primary and secondary students' score was very low and even getting lower from year to year (National Institute of Educational Testing Service,

2010). When compared with other countries in the region, particularly in countries where people use English as a foreign language, the average TOEFL iBT score of Thai examinees was lower than examinees in Indonesia, China, Taiwan and Korea (ETS, 2011). Meanwhile, the average scores in Paper-Based TOEFL and IELTS were the lowest in the list of countries in the region (IELTS Partners, 2010; ETS, 2011).

In a university, Thai undergraduate students even in international programs have minimal English listening and speaking skills. That serves as a barrier in communicating English in the classroom (Pawapatcharaudom, 2007). The school records of another university presented the students' summative scores in listening and speaking courses and found that it was approximately between 40-61% (Kampheang Phet Rajabhat University, 2009). The courses' instructors pointed out the students' English pronunciation errors and their lack of skills in basic English pronunciation (Winaitham, Phuwichit & Singhara, [Interview], 2009). Despite its boost in language learning for communicative approach, a grammatical study and rote learning of vocabulary have been in focus rather than the pronunciation aspects (Wiriyachitra, 2002). Hence, Thais

as EFL learners have difficulties in using English for communication especially with listening and speaking. Its impact on Thai learners can be seen in their pronunciation errors when communicating in English.

Literature review

Several studies on English pronunciation problems were conducted as well as the problems affecting the pronunciation skills of Thai undergraduate students. Chomphuboot (2005) studied Thai undergraduate students' pronunciation ability and presented that stress and intonation in English are the main problems for Thai undergraduate students and affect their failure of communication. One factor that could enhance this problem could be the use of mother language (Thai) as a custom. Dee-in (2006) found that Thai people's problems with consonant sounds included /g/, /tʃ/, /dʒ/, /v/, /z/, /ʒ/, /θ/, /ð/, /ʃ/ and the problems with vowel sounds were /iː/, /ɪ/, /e/, /ə/, /u/, /uː/, /au/, /eɪ/, and /eə/. In addition to Thai's pronunciation problems, stress and intonation of English also play a part in their inability to produce the correct form of English speaking. Dee-in also pointed out the manner of differences in articulation of the two languages which affected Thais' pronunciation errors in English. Another

study reports that the students performed inappropriate and poor pronunciation, particularly in the consonant sounds of /v/, /θ/, /ð/, /ʃ/, /dʒ/, two-consonant and three-consonant clusters, like /ʃr–/, /θr-/, /skw-/, /-lps/, /-lpt/ and the vowel /ə/ (Jukpim, 2009). Phon-ngam (2008) studied the consonant sounds as an English pronunciation problem for Thai and Lao undergraduate students and found that the undergraduate students always pronounced /r/ as /l/, pronounced /ð/ as /t/ and /d/, pronounced /θ/ as /t/ and /s/. Phon-ngam concentrated on the mother tongue (L1), age, learning background, attitudes and motivation, learning materials as well as an instructional design, as important factors to the pronunciation of another language (L2). Vairojanavong (2000) indicated Thai undergraduate students' pronunciation ability and found that the students could not use their pronunciation ability to communicate understandably. The factors affecting their pronunciation ability included English learning background, poor attitudes and motivation toward important roles of pronunciation and English learning. Wei & Zhou (2002) claimed that Thai students usually make use of Thai sense in English pronunciation; for example, neglecting to pronounce the final sounds, words with /r/ pronounced as /l/, words with /ð/ and /z/

pronounced as /s/. In addition, they used inappropriate intonation in Yes-No and Wh- questions. Stress is one of the biggest problems for them. Wei & Zhou pointed out many causes of those problems, for example, the language teachers' styles of pronunciation (always in Thai style) and the inhibitions to imitate native speakers' pronounciation.

Purposes of the Study

As mentioned, undergraduate students require considerable practice in English communication and pronunciation skills. This study aimed to investigate the Thai undergraduate students' English pronunciation errors and the sound features which mostly affected the errors. The investigation of pronunciation errors was conducted in three areas: 1) listening to words with difficult consonant and vowel sounds, 2) pronouncing consonant and vowel sounds and 3) pronouncing words stress. The study also attempted to explore the factors affecting students' English pronunciation errors and students' pronunciation learning background.

Research Design

This study employed a mixed methods design to collect both quantitative and qualitative data using English pronunciation tests, a questionnaire and a semi-structured

interview as research instruments. The tests were conducted to investigate students' English pronunciation errors in three problematic sound features: difficult consonant sounds, vowel sounds and word stress. The questionnaire and the interview were also used to explore the factors affecting the students' pronunciation errors and their pronunciation learning background.

Subject of the Study

The subjects were thirty Thai undergraduate students studying in the second-semester of the academic year 2010 at Kamphaeng Phet Rajabhat University (KPRU). The sample was purposively selected based on two requirements: 1) freshmen students 2) taking in Listening and Speaking I course. The students were also selected from different proficiency in English. The students from Business English program were tagged as the students with high proficiency in English. The students from Public Health and Tourism Industry programs with the average grades of B and C+ in Listening and Speaking I were tagged as the students with moderate proficiency, whereas the students with the average grades of C, D+ and D in Listening and Speaking I were tagged as the students with low proficiency. In addition, the study had

three informants who were English lecturers at KPRU for over four years. One was an English native speaker from Wales and the other two were Thai.

Instruments

1. English pronunciation tests

The pronunciation tests were multiple-choie questions divided into two sections: listening to words and pronouncing words. The listening tests consisted of:

1.1 Five minimal pairs of difficult consonant sounds: /l/ & /r/, /v/ & /w/, /t/ & /θ/, / / & /t / and /s/ & /z/ such as *long & wrong, veal & wheel, tin & thin, shop & chop, sue & zoo*.

1.2 Four minimal pairs of difficult vowel sounds: /e/ & /ei/, / / & / /, / / & / / and /i / & / / such as *pen & pain, not & note, caught & coat, heat & hit.*

The pronunciation tests included:

1.3 Twenty general words such as *rich, paper, taste, shown, caught* that were used to check the pronunciation errors in consonant and vowel sounds

1.4 Twenty English borrowed words in Thai language such as *copy, computer, captain, oxygen, guitar* that were used to check the pronunciation errors in word stress

1.5 Thirteen words that were familiar to the students such as *accident, company, original* that were used to check the pronunciation errors in word stress

1.6 Thirteen words that were unknown to the students such as *absolute, conjugate, subsidize* were used to check the pronunciation errors in word stress.

Those words used in the tests were collected from pronunciation learning at BBC website (BBC Learning English, 2010), English classes at KPRU, the Royal Institute Dictionary B.E.1999 (The Royal Institute, 2003), and Chomphuboot's word synthesis of students' English stress problems (Chomphuboot, 2005). The pronunciation tests were checked for validity, reliability, and difficulty with three experts and 100 pilot samples.

2.   Questionnaire

The questionnaire consisted of three sections: 1) personal information; 2) surveying questions and 3) open-ended questions. Section 2 aimed to rate students' opinions and frequency toward their pronunciation learning and background. The open-ended questions in Section 3 explored factors affecting their pronunciation errors. The questionnaire was tried out with fifty pilot samples, then, with thirty actual samples after the expert's check and advice.

3.   Interview

A semi-structured interview was conducted to gather in-depth information. Three English lecturers at KPRU allowed the researcher to record an interview and to ask questions related to English pronunciation teaching, students' previous pronunciation training in class including the views toward students' problems in English pronunciation.

Procedure

In this study, the students were asked to do three tasks in a computer center at Kamphaeng Phet Rajabhat University. Firstly, the students altogether were assigned to listen to words from CD operated by a main computer with two loud speakers set in the computer room. The students listened to those words twice before choosing the best answers in an answer sheet. Then each individual student pronounced the words from a task sheet, using a microphone and an audio recording software program in a computer for recording. After the pronunciation tests, the questionnaire was assigned to them. Finally, the interview session with three English lecturers was conducted to elicit further and in-depth information for the Previously mentioned points.

Data Analysis

1. Pronunciation tests

The students' pronunciation tests were checked by an English teacher at KPRU. Word sounds were also checked based on Oxford Advanced Learner's Dictionary (Oxford University Press, 2011). After that, frequency distribution was used to show the class intervals of the students' scores and the mean score. Then, the mean scores were calculated as percentage to see the students' rates of pronunciation accuracy and errors.

2. Questionnaire

Descriptive statistics was used to analyse the data in section one and two and the last section which consisted of open-ended questions was analysed by content analysis and conducted in three steps. Firstly, the questionnaire responses were transcribed and translated from Thai to English. Then the transcription was coded into different points. Finally, the data were categorized on the basis of the research question.

3. Semi-structured interview

The interview was conducted using the audio recording program in the computer. The content analysis was used to analyse the data. The interview responses from the recordings were transcribed and then the transcript was coded for grouping information based on the research question. Finally, the results were categorized and classified into different categories.

Results

1. The results of the pronunciation tests

Table 1 shows all measurements of listening values in difficult consonant and vowel sounds respectively as well as the pronunciation values in difficult consonant sounds, difficult vowel sounds, and word stress. The results in the listening part showed that most subjects' average score in difficult consonant sounds was higher than the mean score (**19** > *15.93*) while those of difficult vowel sounds were lower than the mean score (**12.5** < *14.76*). On the highest frequency of the scored boundary, the average score in the pronunciation test of consonant and vowel sounds was higher than the mean score (**17.5** > *14.70*) while those of all stress sessions were lower than the mean scores of borrowed words (**10** < *10.60*), familiar words (**4.5** < *7.96*) and unknown words (**3.5** < *7.06*) respectively. (Note: In the brackets, the average scores are **bold**. The mean scores are *italic*.)

Table 1: Mean score and average score by frequency

Tests	Score Total	Mean Score (X̄)	Most Frequency		
			n (N=30)	Scored Boundary	Average Score
1. Listening Tests					
(1.1) difficult consonants	25	15.93	14	17-21	19
(1.2) vowels	20	14.76	16	11-14	12.5
2. Pronunciation Tests					
(2.1) consonants and vowels	20	14.70	14	16-19	17.5
(2.2) stress on borrowed words	20	10.60	18	8-12	10
(2.3) stress on familiar words	13	7.96	11	3-6	4.5
			11	7-10	8.5
(2.4) stress on unknown words	13	7.06	14	2-5	3.5

Table 2 shows percentage of the average scores compared to students' accuracy and error in their listening and pronunciation. The percentage in the middle column is for pronunciation accuracy and the pronunciation error is presented in the last column. In Table 2, the *most accuracy* of pronunciation ability was shown in pronunciation of consonant and vowel sounds (87.5%), listening to difficult consonant sounds (76%), and the stress on familiar words (65.3%). In contrast, the *most pronunciation errors* appeared in pronouncing stress on unknown words (73.1%), familiar words (65.4%) and borrowed words (50%).

Table 2: The percentage of pronunciation accuracy and error

Tests	Accuracy	Error
1. Listening Tests		
(1.1) difficult consonants	76%	23%
(1.2) vowels	62.5%	37.5%
2. Pronunciation Tests		
(2.1) consonants and vowels	87.5%	12.5%
(2.2) stress on borrowed words	50%	50%
(2.3) stress on familiar vocabularies	34.6%	65.4%
	65.3%	34.7%
(2.4) stress on unknown vocabularies	26.9%	73.1%

2. The results of the questionnaire

As mentioned, the descriptive statistics analyses were carried out in the first two sections. It was found that the subjects' ages ranged from 18 to 21 years old, with a mean of 19 years old, majored in Business English (30%), Tourist Industry (33%), and Public Health (37%). Most of them (97%) finished grade 12 from secondary level, and others (3%) got a degree of Professional certificate.

The results from section two were calculated for mean and interpreted based on the criteria below:

      3.25-4.00   *usually* true

      2.50-3.24   *sometimes* true

      1.75-2.49   *seldom* or usually not true

      1.00-1.74   *never* or very rarely true.

(Adapted from SILL Version 7.0 (ESL/EFL), Oxford, 1989)

According to the data analysis and the results shown in Table 3, the frequency of Thai undergraduate students' English pronunciation learning *sometimes* happened. The mean was around 1.10-3.50 or an average of 2.81. The students reported that the pronunciation learning *usually* happened with the help of an English lecturer who introduced English pronunciation in class (3.50) and from English class participation (3.47). They *sometimes* used strategies for memorization and imitation from an English teacher as a model (3.13) and *sometimes* practised the pronunciation out of class (2.55), using textbooks (3.00), from websites for English pronunciation learning (2.90), using audio and visual

media (i.e. software program, courseware, video, TV) (2.80). Others were reported that the students *sometimes* talked with foreigners (2.73) and listened to English movies and songs (2.57). Surprisingly, most students rated that Thai lecturers *usually* used Thai in English classes (3.46).

Table 3: Thai undergraduate students' English pronunciation learning and practice.

English Pronunciation Learning and Practice	Mean
1. I learn and practise pronunciation in English class.	3.00
2. I learn and practise pronunciation out of class with:	2.55
2.1 Textbooks	3.00
2.2 Dictionaries	2.70
2.3 Other published prints (i.e. newspaper, magazine, cartoon books)	2.73
2.4 TV shows / Radio programs / Software programs	2.80
2.5 Internet / Websites	2.90
2.6 Foreigners	2.73
2.7 Listening to English songs and movies	2.57
2.8 Others ………..	1.03
3. I pronounce words correctly based on English pronunciation rules.	2.67
4. English class could guide me to pronounce appropriately in English.	3.47
5. I listen and speak English out of class.	2.67
6. I learn the pronunciation with memorizing from English lecturers.	3.13
7. The English lecturer introduces English pronunciation in class.	3.50
8. English lecturer who is Thai speaks Thai language in class.	3.46

Lastly, the data from the open-ended questions were analysed. The content analysis was used to interpret the students' responses and the factors affecting students' pronunciation and pronunciation errors which were indicated in the five following points.

1. The lack of basic pronunciation of English and phonetics (50%)

2. Articulation differences between Thai and English speakers (45%)

3. The minimal use of English from the world around them (57%)

4. Too much anxiety when facing foreigners (87%)

5. Too much worry about English grammar, tenses, vocabulary and so on (90%)

Additional findings included the students' negative attitudes toward studying English (28%). They described English as very difficult and not necessary for their daily life. English classes could not really help them improve their English pronunciation (26%). However, over 50% believed that their English pronunciation could be improved with frequent communication with native speakers and use of various English learning strategies such as listening, imitation and repetition.

3. The results of the semi-structured interview

The five categories were found from the interview: 1) methods used to improve students' English pronunciation, 2) Thai undergraduate students' pronunciation styles, 3) students' sounds problem, 4) factors affecting students' pronunciation errors and 5) recommendations for pronunciation improvement.

The three English teachers' various strategies to help improve Thai undergraduate students included the use of relevant materials like video CDs/DVD, a computer and Internet connection (T1),

introduction of some kinds of phonology and phonetics in classes (T2), using simple words and sentences as examples of how to pronounce in English (T3). The students' pronunciation errors were due to their ridiculous feelings to pronounce in English styles (T2) and making inappropriate stress (T3). In addition, a number of English sounds (i.e. /θ/, /ð/, /v/, /r/,/ /) disappeared in Thai language which made it more difficult for Thai undergraduate students to articulate many English words (T1, T2). The factors affecting Thai students' pronunciation and errors included the differences of patterns and manners of articulation between Thai and English (T2), the derivation of English pronounciation with Thai tones beginning from the primary level (T1) and confusion on English pronunciation learned from English bilingual teachers such as Filipinos, Burmese, Chinese, and others (T3). The recommendations from the three teachers focused on increasing facilitation of English learning environment (i.e. language center, English self-accessed center, computer infrastructure) (T1), knowledge of English phonology (T2) and an attempt to approach real-life English use (T3).

Note: T1 (Teacher 1), T2 (Teacher 2), T3 (Teacher 3)

Discussion

According to the results of this study, Thai undergraduate students encountered difficulties in English pronunciation to difficult consonant sounds, difficult vowel sounds and stress in a different level. In the case of consonant sounds, the students performed well both in the identification of sounds and pronunciation of words. They could identify a sound from word-pair listening with 76% accuracy. Meanwhile, word pronunciation was performed better, with 87.5% accuracy. Excluding the sound /ʃ/ such as 'shed', 'shown' (20% accuracy), /ʃ/ & /tʃ/ such as 'sheep' & 'cheap' (45% accuracy) were performed with a lot of errors as previously claimed by Jukpim (2009) and Phon-ngam (2008).

In the case of vowel sounds, Thai undergraduate students got somewhat stuck on minimal-pairs of vowel sounds. The most striking sounds involved long vowels and diphthong such as /ɔː/ & /əʊ/ (i.e. 'bought' & 'boat'), /e/ & /e / (i.e. 'tell' & 'tail'), /ɪ/ and /iː/ (i.e. 'itch'& 'each'). Still, the pronunciation was performed really well. Only the two vowel sounds (/ɔː/ in the word 'lawn' and /əʊ/ in the word 'folk') were pronounced with a

lot of errors (pronouncing 'lawn' as 'lao' and 'folk' as 'forg'). Though vowel sounds of English were hardly claimed as Thai undergraduate students' pronunciation problems, a vowel sound was identified as a cause of language learners' articulation mistakes and should be focused on from the beginning (Kelly, 2003).

The final session of the pronunciation tests was concerned with stress. The participants produced incorrect pronunciation with very high errors and the lowest score was found in this session. The mistaken pronunciation frequently appeared when the students inappropriately pronounced and placed stress on the wrong syllables. This finding was similar to the identification noted in previous studies such as Palawongse (2005), Kanoksilapatham (2005), Chomphuboot (2005), Wei & Zhou (2002). As previously claimed, Thai students always assigned stress on the final syllable such as 'compuTER', casiNO, origiNAL, invisiBLE, exerCISE, generally with long duration. In the present study, the participants performed stress with varying values in each group of words (borrowed words, familiar words, and unknown words). Two values were found in familiar words (65.3% of scores from 37% of participants and 34.6% of scores from

another 37% of participants). The first value, and the top-most were from Business English students while the second value was from the students in Public Health and Tourist Industry programs. However, the participants from every program produced stress with maximal errors on the unknown words (i.e. subsidize, get ahead of, conjugate, personify) but performed better on borrowed words (i.e. guitar, party, nylon, counter).

In the additional finding regarding the case of pronunciation, Thai undergraduate students hardly pronounced the final sounds /l/, /f/, /s/, /b/ such as 'still', 'golf', 'nightclub', including the final /p/, /t/, /k/, which were inaudibly released in Thai syllable-final position (Tingsabadh & Abramson, 1993), in the words 'get up', 'accident', and 'poke'. This case was also a concern and mentioned as a pronunciation problem for EFL/ESL learners (Kelly, 2003; Yangklang, 2006).

As described in the results of factors affecting pronunciation errors, a difference between languages such as structure and patterns, sound system, manners of articulation were as a struggle for learners of another language (Dee-in, 2006; Palawongse, 2005). Thus, it would be very helpful to introduce the English rules of pronunciation, phonetics and/or phonology in EFL/ESL

classes. Those were similar points and concentration from previous studies such as Thapornpard (1995), Wei & Zhou (2002), Phon-ngam (2008) and Jukpim (2009).

However, the pronunciation class would be successful with an instructor who obtains effective skills in English oral communication and the right model for pronunciation (Cleesuntorn, 2004; Jukpim, 2009; Boto & Karavi, 2011). In contrast, a major factor of Thai students' pronunciation problems and errors was due to insufficient skill of English teachers in Thailand (Cleesuntorn, 2004 : Wiriyachitra, 2002.)

From the researcher's experiences, Thai EFL class places a great emphasis in English grammar, structure, and vocabulary. In the area of pronunciation, English segmental features (consonants and vowels) are sometimes introduced to the students, but generally not concentrated in suprasegmentals (stress, intonation, pitch quality etc.). More information was revealed from this study and previous studies such as Palawongse (2005), Kanoksilapatham (2005), Chomphuboot (2005), Wei & Zhou, (2002) that Thai students encountered with suprasegmental production more than those of the segments. While the study of suprasegmental features of English was neglected in Thai EFL classes, there were many studies suggested

suprasegmental production as important as segmental study (Collins & Mees, 2003; Mckay, 2002; Jenkins, 2002; Varasarin, 2007).

Recommendation

With regards to the citation and findings, the improvement of English pronunciation for Thai undergraduate students is recommended in the following areas. First, the results from the pronunciation tests show that Thai undergraduate students need a pronunciation course or an intensive training which covers the study of English manner of articulation, English phonetics, segmental and suprasegmental features which focus more on the problematic sounds, stress, and intonation.

As mentioned regarding the good model of English speaking and pronunciation, then English instructor should obtain adequate knowledge of English pronunciation so the students can learn to produce the sounds correctly. Pronunciation learners would be successful in pronunciation class with the instructor's help, great lesson plans, good preparation, wide variety of listening, speaking and pronounciation drills and using interesting materials or multimedia-based audio and visual function. Another important thing is that the instructors should concentrate more on learners' performance than the evaluation.

Next, a positive attitude toward English including appreciating the language and its culture (Pawapatcharaudom, 2007) was important as a major factor to encourage Thai undergraduate students to English language acquisition. Though the world surrounding them does not use English in a daily basis, students would be motivated when provided with an excellent environment from a school, for example, technology-aided instruction set in a classroom, providing various educational materials, self-access and or English language unit service, disciplines to use English such as speaking English in English class, with English lecturers, with classmates or using English on public signs (i.e. at a toilet, library, canteen, guide post).

Finally, giving students a chance to speak English in class and out of class could encourage them to actively demonstrate a greater knowledge of English, for example, speaking up during warm-up and pre-listening activities (Jukpim, 2009). Speaking with foreigners in public places like in a sports complex, shopping mall, tourist place (Cleesuntorn, 2004) could also provide encouragement to the learners. Still, a key person to drive the motivation and to improve the students' English competence and pronunciation is an English teacher.

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