THE STUDY OF THE EFECTIVENESS OF AUDIOARTICULATION MODEL IN
IMPROVING THAI LEARNERS' PRONUNCIATION OF FRICATIVE SOUNDS

A THESIS

BY

AMPAWAN IMAMESUP

Presented in Partial Fulfillment of the Requirements for the

Master of Arts Degree in Teaching English as a Foreign Language

at Srinakharinwirot University

September 2011

THE STUDY OF THE EFECTIVENESS OF AUDIOARTICULATION MODEL IN
IMPROVING THAI LEARNERS' PRONUNCIATION OF FRICATIVE SOUNDS

A THESIS

BY

AMPAWAN IMAMESUP

Presented in Partial Fulfillment of the Requirements for the

Master of Arts Degree in Teaching English as a Foreign Language

at Srinakharinwirot University

September 2011

THE STUDY OF THE EFECTIVENESS OF AUDIOARTICULATION MODEL IN
IMPROVING THAI LEARNERS' PRONUNCIATION OF FRICATIVE SOUNDS

AN ABSTRACT

BY

AMPAWAN IMAMESUP

Presented in Partial Fulfillment of the Requirements for the

Master of Arts Degree in Teaching English as a Foreign Language

at Srinakharinwirot University

September 2011

Ampawan Imamesup. (2011). *The Study of the Effectiveness of Audioarticulation Model in   Improving Thai Learners' Pronunciation of Fricative Sounds.* Master Thesis, M.A. (Teaching English as a Foreign Language). Bangkok: Graduate School, Srinakharinwirot University. Advisor Committee:Dr. Phnita Kulsirisawad, Dr. Anchalee Jansem.

The objectives of this research were to investigate the effectiveness of the Audioarticulation model (AAM) in improving the pronunciation of English fricative sounds among adult Thai students and their attitude toward the AAM. Eight third year English Education students from Chiangmai Rajabhat University participated in the pronunciation training course based on AAM for 12 weeks. The study was quasi-experimental design with both quantitative and qualitative data analyses. The participants took pronunciation tests before and after the training course. During the course, they completed the learning logs and a questionnaire developed for measuring their attitudes toward the course. The Mann-Whiney U Test was applied to detect whether the participant have made any improvement in pronouncing English fricative sounds. The open coding system was used as a guideline for the analysis of the questionnaire. The three participants were purposive selected to be nested cases and individually analyzed how they were engaged with AAM.

The finding indicated that all participants significantly improved their pronunciation of fricative sounds at the .05 level. They had positive attitudes toward the AAM. The three nested cases revealed that both activities during each class and teaching techniques used in the training course helped them improve their pronunciation of fricative sounds.

การศึกษาประสิทธิภาพของการใช้ Audioarticulation Model เพื่อพัฒนาการออกเสียงเสียดแทรก

ในกลุ่มนักศึกษาไทย

บทคัดย่อ

ของ

อัมพวรรณ อิ่มเอมทรัพย์

เสนอต่อบัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ เพื่อเป็นส่วนหนึ่งของการศึกษา

ตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต สาขาวิชาการสอนภาษาอังกฤษในฐานะภาษาต่างประเทศ

กันยายน 2554

อัมพวรรณ อิ่มเอมทรัพย์. (2554). *การศึกษาประสิทธิภาพของการใช้ Audioarticulation Model เพื่อพัฒนาการออกเสียงเสียดแทรกในกลุ่มนักศึกษาไทย*. ปริญญานิพนธ์ ศศ.ม. (การสอนภาษาอังกฤษในฐานะภาษาต่างประเทศ). กรุงเทพฯ: บัณฑิตวิทยาลัย มหาวิทยาลัยศรีนครินทรวิโรฒ.คณะกรรมการควบคุม: ดร. พณิตา กุลสิริสวัสดิ์, ดร.อัญชลี จันทร์เสม

การวิจัยนี้มีวัตถุประสงค์เพื่อศึกษาประสิทธิภาพของการใช้ Audioarticulation Model ในการพัฒนาการออกเสียงเสียดแทรกในกลุ่มนักศึกษาไทยและเจตคติที่ได้รับจากการสอนด้วยวิธีดังกล่าว นักศึกษากลุ่มทดลองคือ นักศึกษาชั้นปีที่สาม คณะครุศาสตร์ มหาวิทยาลัยราชภัฏเชียงใหม่ สาขาวิชาภาษาอังกฤษ จำนวน 8 คน ในการฝึกอบรมโดยใช้เทคนิค AAM เป็นระยะเวลา 12 สัปดาห์ งานวิจัยในครั้งนี้เป็นการศึกษาแบบการวิจัยกึ่งทดลอง ซึ่งประกอบด้วยการวิจัยเชิงปริมาณ และการวิจัยเชิงคุณภาพ กลุ่มตัวอย่างทำการทดสอบก่อนและหลังเรียน ตลอดระยะเวลาในการฝึกอบรมกลุ่มตัวอย่างต้องเขียนสรุปความรู้หลังการเรียน และในชั่วโมงสุดท้ายของการเรียน กลุ่มตัวอย่างทำแบบสอบถามวัดระดับเจตคติต่อการเรียนการสอน Mann-Whitney U Test ได้รับการปรับใช้เพื่อการวิเคราะห์พัฒนาการด้านการออกเสียง ระบบ รหัสปลายเปิดได้รับการนำมาใช้เพื่อวิเคราะห์แบบสอบถาม นอกจากนี้กลุ่มตัวอย่างจำนวนสามคนได้รับการสุ่มเลือกเป็นกลุ่ม nested cases ในการวิเคราะห์ปฏิกิริยาของกลุ่มตัวอย่างต่อการเรียนด้วยเทคนิค AAM และเพื่อสนับสนุนผลการวิจัย

ผลการวิจัยพบว่า กลุ่มตัวอย่างมีพัฒนาการด้านการออกเสียงที่ดีขึ้นอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 อีกทั้งมีเจตคติที่ดีต่อการใช้ AAM และผลการศึกษาในกลุ่ม nested case จำนวนสามคนพบว่าระยะเวลาและเทคนิคที่ใช้ในการฝึกอบรมสามารถช่วยให้กลุ่มตัวอย่างมีพัฒนาการด้านการออกเสียงเสียดแทรกที่ดีขึ้น

คำสำคัญ การออกเสียง เสียงเสียดแทรก นักศึกษาไทย

The thesis titled

"The Study of the Effectiveness of Audioarticulation Model in Improving Thai Learners' Pronunciation of Fricative Sounds"

by

Ampawan Imamesup

has been approved by the Graduate School as partial fulfillment of the requirements for the

Master of Arts degree in Teaching English as a Foreign Language of

Srinakharinwirot University.

…………………………………….. Dean of Graduate School

(Assoc. Prof. Dr. Somchai Santiwatanakul)

September , 2011

Thesis Committee   Oral Defense Committee

………………………….. Major-advisor   ………………………. Chair

(Dr. Phnita Kulsirisawad)   (Dr. Wanlapa Thaijinda)

………………………….. Co-advisor   ……………………….. Committee

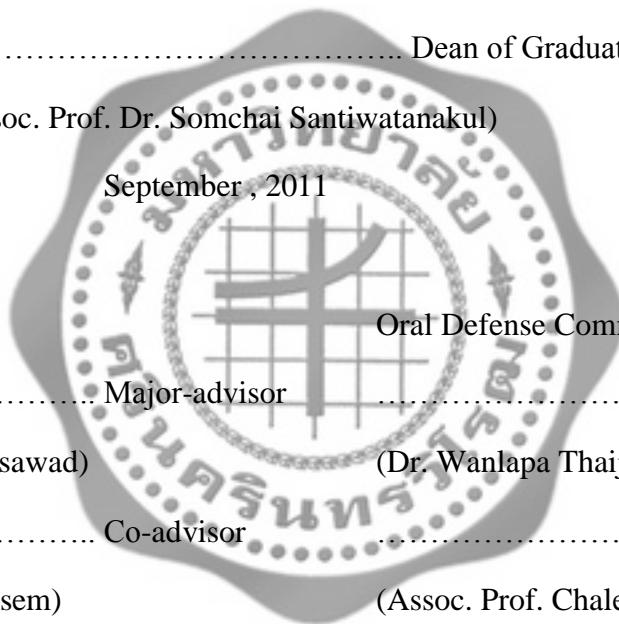(Dr. Anchalee Jansem)   (Assoc. Prof. Chaleosri Pibulchol)

                                                 ……………………….. Committee

                                                 (Dr. Phnita Kulsirisawad)

                                                 ………………………... Committee

                                                 (Dr.Anchalee Jansem)

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

LIST OF FIGURES

LIST OF TABLES

CHAPTER I

INTRODUCTION

This chapter addresses pronunciation problems that English language learners, especially Thai EFL learners encounter when they speak English. The following section presents the background of the study which involves English pronunciation problems among EFL learners and how such difficulties could be overcomes.

Background of the study

Each language has its own phonological structure which contrasts with that of other languages and its poses problems in the accommodation of English sounds. One of the most difficult problems facing non-native speakers of English is pronunciation. According to Lado (1961),

> ....We have ample evidence that when learning a foreign language, we
>
> tend to transfer our entire native language system in the process. We tend
>
> to transfer to that language out phonemes and their variants, our stress and
>
> rhythm pattern, our transitions, our intonation patterns and their interaction
>
> with other phonemes (Lado, 1961, p.11)

From Lado's point of view, foreign language speakers are likely to speak the target language, so called the second language (L2), with the characteristics of their own first language (L1). In other words, their target language pronunciation is likely to be interfered by their L1 pronunciation system. The systematic development of speakers' language reflects a system of L2 knowledge referred to as interlanguage (Selinker, 1992).

Since the notion of interlanguage (IL) was proposed by Selinker (1992), it has been commonly acknowledged that IL is an incident which an L2 speaker adopts a language system that is neither the L1 nor the L2. It is the third language which has its own rules, and lexicon (Gass & Selinker, 2008). According to Selinker, a language learner tends to rely on their L1 system in order to aid his language acquisition and simultaneously reinforces his learning strategies. This process of acquiring L2 is called language transfer (Selinker, 1992). Language transfer has two kinds: positive and negative transfer (Keys, 2002). Cross-linguistic similarities is one of the positive transfer. It can facilitate L2 learners in learning a new language especially at a segmental level. However, Keys (2002) mentions that this function is more problematic at a suprasegmental level. With regard to negative transfer, there are many forms of it e.g., overproduction, underproduction, production errors, and misinterpretation (Odlin, 1989). According to Keys, overproduction occurs when L2 speakers try to avoid certain dislike sounds and refuse to use them. As a result, they tend to opt for a simpler word that does not contain the problematic sounds. The corollary to underproduction is the overproduction. Speakers try to produce a lot of simple sentences because they avoide the difficult one such as complex sentences. The third negative transfer is production error. Speakers use patterns from the L1 which are common features of the L2 output. For example, they might substitute /T/ in 'thin' /TIn/ with /t/ and pronounce it as /tIn/. The last one is misinterpretation. Speakers mishear the L2 sound which is similar to an L1 sound so they classify and produce the L2 phoneme output with L1 influence (Keys, 2002). These incidents can alter the intelligibility of speakers when they communicate (Bent & Bradlow, 2003).

The deficiency in pronunciation ability can affect the ability of speech production. Carruthers (2007) states that good pronunciation is one of the foundations of effective

spoken communication. If speakers pronounce the words clearly and correctly, their audience interlocutor would be able to understand what they are trying to express easily. However, misunderstanding, in many cases, occurs when words are inaccurately pronounced (Carruthers, 2007). In the study of Derwing and Rossiter (2002), it was found that pronunciation difficulties are the main concern of communication breakdown among ESL speakers, adult immigrants in America.

Besides the ability to communicate, Nation and Newton (2009) propose that the lack of stable pronunciation can seriously affect students' memory. They suggest that our brain has an important mechanism called phonological loop which helps us keep long-term memory through repetition of words or phrases. It means that the knowledge of stable pronunciation has a direct impact on the memory capacity of our brain. In other words, the amount of stable pronunciation knowledge can help the learners enhance long-term memory capacity. Therefore, many linguists and L2 teachers are trying to help their students overcome these difficulties.

Many ESL / EFL students have difficulties with English pronunciation both in segmental and supra-segmental levels (Fraser, 2000; Demirezen, 2008). However, this study focuses only on segmental level which is the fundamental unit in pronunciation. It is important to pay attention to the very beginning unit of speech because the segmental levels serve as a basis of the supra-segmental level which is more advanced. Furthermore, many L2 students claim that the segmental pronunciation skill is their main problem and it affects their English speech perception and communication (Derwing & Rossiter, 2002; Hasan, 2000; Tsukada, 2006).

With regard to problematic segmental sounds, Chinese speakers have difficulties in pronouncing plosives /b/, /d/, /g/ in the syllable-initial position (Chan & Li, 2000). This phenomena is similar to Japanese speakers who usually substitute voiced bilabial stop

/b/ for /v/ and also cannot pronounce consonant clusters because either /v/ or consonant clusters do not occur in their language system (Ohata, 2004). Vietnameses speakers of English (Smyth, 1995) usually replace /T/ for /t/ or over-pronounce /ð/ when it appears in the initial position and sometimes omit /T/ in the medial position (Santry, 1992).

As mentioned earlier, second language pronunciation errors are often caused by the transfer of well-established L1 sound system. In Thai context, Thai learners tent to have difficulties in oral communication (Ministry of Education in Thailand, 2008). A great number of studies show that Thai sound system is noticeably different from English (Brudhiprabha, 1964; Jukpim, 2009; Smyth, 1995; Thongsin, 2007). Many researchers agree that fricative consonant sounds are one of the most difficult sounds for Thai students (Smyth, 1995; Thep-Ackrapong, 2005). For example, /v/, /t/, /ð/, /z/, /s/, and /z/ regardless of their position (Brudhiprabha, 1964; Thongsin, 2007; Jukpim, 2009; Yangklang, 2006). Jukpim (2009) indicated that fricative sounds /v/, /t/, /ð/, /z/, /s/, and /z/ were serious problematic sounds for Thai students. They usually substitute these sounds with sounds that occur in the Thai system. For instance, /t/ and /ð/ are often substituted with /t/,/d/, or /s/ . The insufficient capability in pronunciation of Thai students, therefore, has affected the ability in communication. Saezhong (2005) studied the effects of English speaking abilities of fourth years English Majors in oral presentation. He found that linguistics is one of factors that affected the speaking. Similar to Sursattayawong (2006) investigation a problems that occured when nurses at Rajavithi Hospital conversed in English with foreign patients. She found that the nurses used wrong word choices, mispronounced words and also lacked confidence when pronouncing English words.

Since 1980, English pronunciation has been receiving more attention in EFL classrooms (Celce-Murcia, Brinton, & Goodwin, 1996). It has been acknowledged as a fundamental skill which students should acquire, primarily because it directly

affects comprehension (Yangklang, 2006). Kelly (2000) suggests that there are two key problems with pronunciation teaching. First, it is likely to be neglected. Second, if it is not neglected, it tends to be reactive to a particular problem that has arisen in the classroom rather than being strategically planned. Moreover, some researchers claimed that the time in pronunciation practice in traditional classroom instruction has remained relatively limited (Neri, Cucchiarini, & Strik, 2006; Demirezen, 2008). These phenomena also happen around the world (Macdonald, 2002) including Thailand (Neri et al., 2006). Wiriyachitra (2002) states that many teachers pay less attention in speaking and listening skills. Biyaem (1997) (as cited in Wiriyachitra, 2002) explains that heavy teaching loads, demanding tutorial teaching, students' learning attitudes contribute to the decreased attention in speaking and listening skills. In addition, many researchers found that Thai teachers have insufficient skill (Biyaem, 1997 as cited in Wiriyachitra, 2002 ; Wei & Zhou, 2002). Therefore, in teaching pronunciation, teachers are likely to use Thai style English pronunciation (Wei & Zhou, 2002). As result, the students "absorb" the Thai style pronunciation of English.

As mentioned, the obstacles in improving Thai students' pronunciation of English are the teacher's insufficient knowledge of pronunciation and time restriction. Regarding the first factor, it might be because English pronunciation is one of the most difficult areas for both teachers and students (Jukpim, 2009). Kelly (2000) claims that many experienced teacher would admit that they lack knowledge of the theory of pronunciation and they feel the need to improve their pronunciation. As for the second, Demirezen (2010b) claims that in a traditional classroom, the teacher usually spend only 10-20 minutes teaching pronunciation. It is not enough for the students to get familair with their English pronunciation. This idea is reinforced by Wei and Zhou (2002) who indicate that "most of Thai university students have this problem, pronunciation problems, because of the

limitation of time and lacking of visible targets, most students just ignore it" (Wei & Zhou, 2002 p. 11.)

Grounded on my teaching experience at Chiangmai Rajabhat University, I have noticed that fricative sounds especially /ð/ and /T/ are the most problematic sounds for my students. They usually mispronouncing /ð/ and /T/ and tend to substitute these two sounds with /t/ and /d/ respectively. For example, the word "that" usually becomes "dat" or "three" becomes "tree". When I recast them, their pronunciation changed immediately. However, the problem persists and then becomes errors. Since the fricative sounds, as some researchers suggest, have been the main problems for Thai students, I am, therefore, determined to find a way to help the students overcome these problems. Moreover, if the problems continue, without being recognized that they are pronunciation error, it can lead to fossilization. (O'Grady, Aronoff, Rees-Miller, & Archibald, 1997).

Concerning the problems mentioned earlier, I have found various teaching techniques that are developed to help L2 students with English pronunciation (Carruthers, 2007; Celce-Murcia et al., 1996; Hazan, Sennema, Iba, & Faulkner, 2005; Kendrick, 1997; Yangklang, 2006). Among many studies, I have found a study which seems very interesting. Demirezen (2010b) has proposed the Audioarticulation Model (AAM) which is used to treat fossilized pronunciation in Turkish EFL learners. According to his longtitudinal studies, he found that during 50 minutes of using AAM in the classroom, the chronic pronunciation error of Turkish learners can be repaired (Demirezen, 2005a, 2005b, 2006, 2007b, 2007a, 2008, 2009; Hismanoglu, 2009). It is absorbing that during 50 minutes of a class time students have to learn how to pronounce the minimal pair sounds sytematically by using various drill practicing techniques.

Therefore, it is beneficially interesting to examine this method in Thai context especially in English Education students who will be teachers. This study aims to

investigate the effectiveness of the Audioarticulation Model in improving the students'

pronunciation of the six English fricative sounds: /v/, /T/, /ð/, /z/, /S/, and /Z/, which

are considered problematic for Thai EFL learners (Brudhiprabha, 1964; Jukpim, 2009;

Smyth, 1995; Thongsin, 2007). I hoped that the result of the study would be valuable for

teachers, EFL adult learners, and students who would like to achieve accurate English

pronunciation.

Objectives of the study

The study was conducted with three main purposes.

1. To measure the effectiveness of the Audioarticulation Model (AAM) in Thai

context.

2. To investigate whether the Audioarticulation Model help to improve Thai

learners' pronunciation of fricative sounds.

3. To investigate how Audioarticulation Model (AAM) were experienced by Thai

learners.

Significance of the study

Since the mispronunciation exist in Thai students, these errors alter the quality of

communication and the students' speech intelligibility (Wei & Zhou, 2002). Moreover,

many studies claim that Thai teachers seem to have insufficient pronunciation knowledge

and lack of confidence to teach pronunciation (Wiriyachitra, 2002; Wei & Zhou, 2002).

To solve these problems, therefore, it is better to education students who are in English

major to improve their English pronunciation by attending the pronunciation training

course. It will help the students to become good English pronunciation in their future

carreer. In addition, it is the benefit of English teachers who interest to apply the AAM to

help their students overcome the erroneous pronunciation.

Scope of the study

This study aims to repair the students' erroneous pronunciation of the problematic sounds /v/, /T/, /ð/, /z/, /S/, and /Z/ among third year English Education students at Chiangmai Rajabhat University by using the Audioarticulation Model. The participants of the study were eight students. All student had to pass ENG 1101 Linguistic and ENG 1103 Introduction to Phonetic. They were choosen by using a voluntary basis technique. The length of the study was 12 weeks.

Research questions

This study aims to answer three main questions.

1. Does the audio-articulation method improve the pronunciation of fricative sounds: /v/, /T/, /ð/, /z/, /S/, and /Z/ of the third year students at Chiangmai Rajabhat University?

2. What are the students' perception of the integration of the Audioarticulation Model in a pronunciation classroom?

3. How did the students experience the integration of the Audioarticulation Model in a pronunciation classroom?

Definition of terms

Fricative sounds   The English sounds which are difficult for Thai students to pronounce. In this study, "pronunciation sounds" refer to /v/, /T/, /ð/, /z/, /S/, and /Z/ which occur in every positions of a words (Jukpim, 2009; Thongsin, 2007; Yangklang, 2006; Brudhiprabha, 1964).

Audioarticulation Model   The pronunciation teaching method designed by Prof.Dr Mehmet Demirizen for the purpose of teaching, correcting and treating fossilized pronunciation of nonnative learners of English. The key techniques of the audio-articulation model are minimal pair contrast, tongue twisters, minimal sentences, sentences with contextual clues (Demirezen, 2010b).

Perception   The process of attaining, awareness or understanding of the pronunciation course based on AAM by organizing and interpreting sensory information.
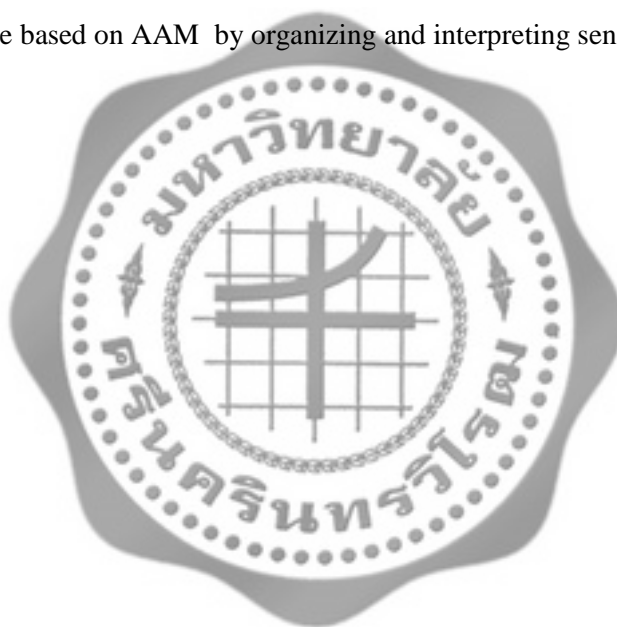
CHAPTER II

REVIEW OF THE LITERATURE

In learning a second language, many studies in linguistic field have revealed that non-native speakers have many difficulties when studying a new language. Among those difficulties, pronunciation is mentioned as one of the most difficult areas and usually has been lack of concern (Derwing & Rossiter, 2002; Neri et al., 2006; Wei & Zhou, 2002). This chapter is a literature review designed to lay the foundations for the study of English pronunciation problems of EFL learners, particularly among Thai students. In addition, age, personality and mother tongue influence that are considered as factors affecting English pronunciation learning and pedagogical practice that are designed to help EFL students to overcome their erroneous pronunciation will be given.

Problems in English pronunciation of EFL students

English has been considered an international language. One of the purposes of learning English is to communicate with foreigners. Kenworthy (1987) claims that the sensible goal and the quality of communication should be the intelligibility or understandability rather than being native like. It means that L2 students should speak close enough for foreigners to match the sound with the original native-speaker sound without too much difficulty in order to gain the meaning of words, phrases, or sentences (Kenworthy, 1987). This idea is widely accepted by researchers and linguists in English teaching field (Nation & Newton, 2009; Nunan, 2003; Wei & Zhou, 2002). Jenkins (2002) (as cited in Nation, 2009) proposes that

"intelligibility has to be the main criterion which consisting of the

phonological and phonetic features that can be crucial as safegurds of mutual

intelligibility in interlanguage talk."

Therefore, many studies have shown that serious pronunciation problems can hamper communication (Derwing & Rossiter, 2002; Jesry, 2005; Neri et al., 2006).

In the area of pronunciation, linguists divide problems that L2 students encounter into 2 levels: segmental and supra-segmental levels. The segmental level focuses mainly on phonemes and allophones inventory while the supra-segmental, the higher level, focuses mainly on stress and intonation. Researchers found that, however, L2 students have problems both at segmental and supra-segmental levels. Harmer (2001) claims that it is extremely difficult to speakers of another language to understand learners who consistently mispronounce a range of phonemes. Similarly, Derwing and Rossiter(2002) indicate that segmental was the big majority of pronunciation problems among students when the communication breakdown occured. In addition, Carruthers (2007) found that an array of pronunciation difficulties stemming from differences in sound inventory, distribution of sounds among the categories of phonemes and allophones, syllable constraints, and prosody are main problems for Japanese speakers. Similarly, Chan and Li (2000) propose that the main difficulties that Cantonese speakers may have with English pronunciation is their inability to correctly pronounce certain sounds because of the differences of the phoneme inventories of the two languages. It is supported the claim of Lado (1961) that learners transfer the forms and meaning from their first language (L1) to the second language (L2). Therefore, when students confront communication problems, they are likely to speak the target language with the characteristics of their own L1. Also, Nation (2001) echoed that the first language has a small but important role to play in communicating both meaning and content.

Apart from the differences between language systems, there are many factors that influence L2 learners to succeed in learning L2 pronunciation (Nation & Newton, 2009;

Jesry, 2005; Celce-Murcia et al., 1996). The important factors are as follows:

Factors Affecting Pronunciation

The pronunciation of language learners can be influenced by a myriad of factors (Jesry, 2005). Nation and Newton (2009) claim that there are five factors that are considered as major influences on learning L2 sound system. They are age of the learner, the learner's first language, the learner's current stage of proficiency development, the experience and attitude of the learner, and the condition of instruction and learning. This bears a striking resemblance to Celce-Murcia et al. (1996) who indicate that the age of the learner, the length of exposure to the target language, the amount and type of prior pronunciation instruction, the learners'attitude, aptitude and motivation toward the target language, and the role of the first language are main factors affecting pronunciation learning. Similarly, Jesry (2005) points out that it is well acknowledged that age, personality including individual personality and learning goal, attitude, aptitude, motivation and the length of exposure to target language, and the role of the first language are the most important factors that affect the learner's mastery of the target language pronunciation. Moreover, O'Grady et al. (1997) also confirm that age, individual differences, and the role of the first language are factors that pose a great impact on second language acquisition. As such, the following sections will highlight age, personality, and mother tongue influence as the main factors that influence L2 pronunciation.

Age

Lenneberg (1967) as cited in Moyer (2004), p. 17 proposes "Critical Period Hypothesis". According to the hypothesis, learners whose age are below 12 years old are likely to perform better in L2 pronunciation than those who are older. However, the notion

of the critical period has been slightly downplayed today because many researchers argue that this hypothesis overlooks some differences between child and adult L2 acquisition such as the level of exposure to the target language, the learners' attitude toward the L2, linguistic expectation of interlocutors, and types of motivation (Celce-Murcia et al., 1996).

Flege (1981) as cited in Celce-Murcia et al., 1996 also explains that age affects the learner's perception of a second language and later language because the first language system becomes increasingly well-integrated and stable as the learner gets older (as cited in Nation & Newton (2009), p. 78). However, in intellectual and psychological aspects, Stevick (1978) (as cited in Nation & Newton (2009), p. 79) indicates that students have no difficulties in imitating new sounds three things that keep them from achieving correct pronunciation are:

1. *They overlook some features*. Teacher might help students by setting a suitable model which is not very difficult for the level of them in order to provide them an opportunity to find out how close their pronunciation is to the standard's.

2.*The learners feel bad to themselves when they copy well*. Because some sounds do not exist in their L1 system, so it is very strange for students to copy and pronounce the word. It might be because the "unwillingness of many teenagers to publicly pronounce the unusual sounds of the new language particularly in the the presence of their friends" (Nation & Newton (2009), p. 79). Developing positive attitudes toward the native speakers of the foreign language might help students feel comfortable to improve their pronunciation when speaking the foreign language.

3.*The learners become anxious about making the sounds*. The rigid pronunciation correctness of teachers might affect the students' anxiety. The teacher should find ways to help the students find out what their pronunciation is like without getting them too worried about it.

A similar caution is echoed by Marinova-Todd, Marshall, and Snow (2000) who say that age influences language proficiency because it is associated with social, psychological factors. Adult students fail to engage the task with sufficient degree of motivation and they probably lack environmental support (Marinova-Todd et al., 2000). However, Florez (1998) argues that older students and younger students have the difference in their experiences but they have the same capacity in learning. As the result, they can both achieve in L2 learning. In sum, adult learners are capable of reaching the challenge of performing competently in a new sound system (Celce-Murcia et al., 1996). Besides the influence of age, other factors such as attitude, aptitude, and learning style are the factors that we have to take into account. Such factors are outlined below.

Personality

"Personality" involves individual personality and learning goal, attitude, aptitude, motivation and length of exposure to target language. The outline of such factors are provided below.

Individual personality and learning goal The individual personality and learning goal are regarded as cognitive factors. They are the mechanics of how a student learns something. O'Grady et al. (1997) explain that cognitive factors are divided into two aspects: cognitive styles and learning strategies. Cognitive styles focus on a discrepancy between field dependent and field independent. Field independent students, when trying to learn something, are not distracted by irrelevant background information. On the other hand, field dependent students usually see the whole picture but may miss the small details. When both of them engage in a communicative context, it seem that the field independent students probably focus more on grammatical form, or on linguistic accuracy, while the latter tends to focus on how to get the message across, or on fluency. (as cited in

O'Grady et al.(1997), p.497)

Attitude and aptitude Regarding aptitude, Carroll (1973) (as cited in (Krashen, 1978) p. 19) defines it as the "rate at which persons at the secondary school, university and adult level learn to criterion". Carroll also suggests that it is probably through this factor "that foreign language aptitude is most closely related with general intelligence" (as cited in Krashan, 1978 p. 21) Moreover, Carroll(1981) (as cited in Celce-Murcia et al., 1996) also propose that there are four traits that constitute language aptitude:

1. Phonemic coding ability : the discrimination and coding capacity of foreign sounds that student can recall.

2. Grammatical sensitivity : the ability to analyze language and figure out rules.

3. Inductive language learning ability : the ability to pick up language through exposure.

4. Memory : the amount of rote learning activity needed to internalize things.

(as cited in Celce-murcia et al, 1996)

Learners who are weak at phonemic coding ability would have much more difficulty achieving a readily intelligible pronunciation than those who have high aptitude in the domain (Celce-Murcia et al., 1996). Therefore, teachers should be sensitive to such differences of learners and should not expect all students to achieve the same level of success.

However, Stevice(1962) (as cited in Celce-murcia et al, 1996) suggest that besides language aptitude, we should give more concern on learners'personalities which also affect the learning process. Baker (1988) suggests that attitudes are complex constructs; there may be both positive and negative feelings attached to a language situation. Ellis (1995) mentions that a positive attitude toward L2 can enhance language learning while

a negative attitude can impede it. So, students who have a positive attitude will probably succeed in learning a second language more easily than those with negative attitude (Ellis, 1995).

Motivation According to O'Grady et al. (1997), there are two types of motivation: instrumental and integrative. Instrumental motivation can be found in a student who learns L2 to attain a specific goal; for instance to get a job or a degree. Integrative, on the contrary, can be found in a student who desires to be socially integrated or to be a part of a particular culture. Studies show that students with integrative motivation may achieve the target language more easily than someone with instrumental motivation. Nevertheless, students with instrumental motivation can also be successful if they have high level of motivation.

Length of exposure to the target language The degree of exposure and the use of the target language can either support or impede pronunciation skill development (Jesry, 2005). Purcell and Suter (1980) (as cited in Nation & Newton, 2009) found that the numbers of years that students have lived in an English-speaking country and with native speakers are the strongest factor related to success in L2 pronunciation. However, Celce-Murcia et al.(1996) indicate that in an EFL setting, students may have fewer chances to surround themselves with the target language. It is the teachers' responsibility to give them ample model of the target language and an opportunity to use the target language outside the classroom (e.g., in language laboratory or learning center).

Mother tongue influence

In second language acquisition, mother tongue students' pronunciation. Lado (1961) emphasizes that L2 students usually transfer their L1 system into the process of producing L2. Theories about second language phonological acquisition have been proposed in order

to explain how and why L1 or mother tongue influence has a heavy impact on L2 learning. To illustrate, Lado (1961) proposed the contrastive analysis hypothesis which compares the two field language systems and to filter the similarity and contrast of both languages. In addition, Selinker (1992) proposed the interlanguage hypothesis which claimed that interlanguage is an on-going system that L2 student hold along the way of moving from L1 to L2.

Among several the hypotheses, interestingly, the information processing theory, the cognitive science in L2 learning theory, proposed by Rumelhart and Norman (1978) indicate that every student has his own schemata which is used to process new information. They also proposed that in the processing new information, there are three modes of learning. The first mode is, accretion. Students add new structures to their schemata. Next isrestructuring. Students recognize already existing structure and then create the new patterns based on the pre-existing schemata patterns. The last one is the tuning mode. Students modify the new and old schemata, creating them more accurate, general or specific. According to Schneider and Schiffrin (1977) and Rumelhart and Norman (1978), we can see that when students learn a new language, they have to compare and combine the new information with the previously learned language in order to manage and access their information more easily. Therefore, we cannot ignore the process of the mother tongue interference in L2 learning . An awareness of such process might help us to pay more attention and take into account the role of the first language when we teach a new language to our students.

In sum, age, personality, and the mother tongue influence are factors that language teachers need to take into account because they help us explain how our students process the new language and find a way to help our students come across the barriers in pronunciation. In the next section, The situation of Thai students when they have to

learn English pronunciation will be discussed. It will serve as an overview of problems

that Thai EFL learners encounter when they learn English pronunciation.

Problems in English pronunciation of Thai EFL students

 Thai and English consonant systems

Manner of Articulation	Place of Articulation	bilabial	labio-dental	apico-alveolar	lamina-prepalatal	fronto-palatal	dorso-velar	Labio velar	glottal
STOPS	Voiceless aspirated voiceless unaspirated voiced	ph p b		th t d			kh k		?
FRICATIVE	voiceless		f	s					
AFFRICATES	Voiceless aspirated voiceless usaspirated			ch c					
NASALS	voiced	m		n			ŋ		
LATERAL	voiced			l					
APPROXIMANTS	voiced					j		w	
TRILL	voiced			r					

Thai Consonant phonemes (Tienmanee, 2005. p.83)

Figure 1. Thai consonants system

Each language has its linguistic system which differs from anothers. Similar to

other languages, many researchers who study about Thai and English language systems

(Brudhiprabha, 1964; Thongsin, 2007; Jukpim, 2009; Yangklang, 2006) agree that English

consonant system and Thai consonant system are different in many ways.

From the chart above, the bold phonetic symbols are the sounds that do not exist

in Thai language system. Therefore, many Thai students have difficulties pronouncing

those sounds correctly. Brudhiprabha (1964) claimed that Thai students tend to substitute

some English sounds with the closed Thai sounds and took those sounds for granted

because they think that such sounds are the same. Jukpim (2009) indicated that Thai

students pronounce vocabulary that contains fricative sounds inaccurately. For example

they usually pronounce /ð/ or /T/ as /s/ or /z/ and they also subscribe /z/ as /s/. What are

Manner of Articulation	Place of Articulation	bilabial	labio-dental	apico-dental	apico-alveolar	apico-prepalatal	fronto-palatal	Apical laminal	Alveolar prepalatal	dorso-velar	Labio velar	glottal
STOPS	Voiceless	p			t					k		
	voiced	b			d					g		
FRICATIVE	Voiceless		f	Θ	s			ʃ				h
	voiced		v	ð	z			ʒ				
AFFRICATES	Voiceless							tʃ				
	voiced							dʒ				
NASALS	voiced	m			n					ŋ		
LATERAL	voiced				l							
APPROXIMANTS	voiced					r	j				w	

English Consonant phonemes (Tienmanee, 2005. p.102)

Figure 2: English consonant system

the reasons that affect Thai speakers' ways of pronouncing English sounds? Wei and Zhou

(2002) did a study about the problems of English pronunciation among Thai students.

They found that some students usually pronounce the English borrowed words in Thai

way. Moreover, they usually substitute /T/ with /t/ , /v/ with /f/ or /z/ with /s/ because

the influences of romanization in pronunciation of English. These phenomena have

strong influence on Thai speakers who lack an opportunity to study English phonetics.

Third, Thai speakers have difficulties in pronouncing final aspirated sounds because

in Thai system, the final consonant sounds are always unaspirated and unvoiced. It is

similar to Thep-Ackrapong(2005) and Abramson and Tingsabadh (1999) who claim that

Thai students usually omitted pronouncing final voiced consonants because they do not

occur in their L1 system. Fourth, Thai teacher's poor English pronunciation results in

Thai students' unintelligible English pronunciation. Therefore, students usually imitate

the pronunciation of their teachers. If teachers have good English pronunciation, their

students pronunciation will be good as well (Abramson & Tingsabadh, 1999). Finally,

the students' attitude toward the expression of native speakers' tone, Thai students are

usually viewed by their peers as show-offish when they try to pronounce like the way

native speakers do (Abramson & Tingsabadh, 1999). As the result, Thai students are reluctant and always shy to pronounce English words close to the original.

In sum, there are two key main factors that obstruct Thai students in achieving the goal of English language learning. The first factor is the differences between Thai language systems, and the second is students' personality, especially their attitudes toward speaking with correct English pronunciation. I do agree with Flege and Port (1981) (as cited in Nation & Newton (2009), p. 80) who suggested that "the most important interference for L1 to L2 occurs at the level of phonetic implementation rather that at an abstract level of organization based on feature", Hence, a teacher should pay more attention to the sounds that are problematic to the learners. The primary concern should be on the main problem, i.e., the language system differences which affect Thai students'pronunciation. Nevertheless, we should also take into account attitude and aptitude differences of the students. Therefore, we should facilitate a positive environment to promote their positive attitudes toward L2 learning. According to the table of Thai (Table 2.1) and English (Table 2.2) language systems and some research evidences that mentioned earlier, we can see that most of the English fricative sounds do not appear in Thai system. It means that this manner of articulation should be given prior concern. Some important characteristics of fricatives will be provided in the next section. It will help us understand more about the nature of these sounds.

Fricative sounds

Fricatives occur when the air stream is forced through a small, narrow, constricted opening in the vocal tract. In relation to manner of articulation, the movement sequence for fricatives is similar to stops: a fore-glide, hold and release. Nonetheless, fricatives are likely to be of relatively greater duration than it is in stop production (Tiffany & Carrell, 1987). English has nine fricative sounds: /f/, /v/, /T/, /ð/, /s/, /z/, /S/, /Z/, and /h/.

According to Tiffany and Carrell (1987) /T/ is the weakest sound of English phonemes so it is generally the most difficult of all sounds for the listeners to discriminate. In the same vein, Celce-Murcia et al. (1996) suggest that fricatives especially /T/ and /ð/ are commonly described as difficult sounds because these phonemes are absent from many language systems. They also point out that L2 students usually substitute /T/ and /ð/ for /s, f, and t/ and /z, v, d/, respectively. This phenomena is similar to the situation of Thai students learning English pronunciation (Jukpim, 2009).

Fricatives as Thai problematic sounds

In view of Thai students learning English pronunciation, they face two basic segmental issues: (a) sounds existing in English but not in Thai and (b) differences in the distribution of phonemes and allophones (Wei & Zhou, 2002). Therefore, Thai students might be confused with sounds that do not appear in the Thai system. Thai students tend to replace the problematic sounds with similar sounds that occur in their language system (Thep-Ackrapong, 2005; Yangklang, 2006).

Regarding the English consonant and vowel sounds that do not exist in the Thai speech sound system, many researchers found that Thai students usually omit the stop and fricative final sounds (Brudhiprabha, 1964; Smyth, 1995; Wei & Zhou, 2002). Moreover, recent research indicates that fricative sounds are severe problematic sounds for Thai students (Jukpim, 2009). Jukpim (2009) designed a study to investigate the problematic sounds in English pronunciation of 200 freshmen students at Kasetsart University Chalermphrakiat (Sakon Nakhon Campus). He found that the fricative consonant sounds /v/, /T/, /ð/, /z/, /S/, and /Ã/ posed the highest level of problems in every position because these sounds do not occur in the Thai language. It is supported by Brudhiprabha (1964) and Smyth (1995) who claim that English has more fricatives than Thai, so Thai students tend to have difficulties in producing these sounds (e.g. /ð/, /T/, /v/, /z/, and /S/).

Furthermore, Smyth (1995) adds that Thai students usually speak English with a Thai accent because they try to fit every English word into the Thai phonological system. It can be assumed that Thai students inaccurately integrate the Thai system and it negatively affects the success of their L2 learning.

Such behavior has an impact on students' learning in many ways. Firstly, the incorrect pronunciation affects students'confidence in speaking English with other people even with their friend who has a better and correct in pronunciation than them. Secondly, it can bring students into the situation of communication breakdown (Derwing & Rossiter, 2002). Therefore, the opportunity to succeed in communication which is the main point of learning English can be hard to achieve.

Regarding the pronunciation problems among L2 students, researchers in area of language teaching pedagogy have proposed ways to help students succeed in English pronunciation learning. In the next section, I would like to give you a brief overview of pronunciation teaching in EFL context. It will depict a clear picture of the development of English pronunciation teaching.

Pronunciation teaching techniques

With the advent of the Communicative Approach in 1980, the focus on language as communication has brought renewed urgency to the teaching of pronunciation (Celce-Murcia et al., 1996). In order to improve students' L2 pronunciation, Celce-Murcia et al. (1996) suggest that there are two general approaches to teach pronunciation: (1) an intuitive-imitative approach and (2) an analytic-linguistic approach. An intuitive-imitative approach is a way that allows learners to listen and imitate the rhythms and sounds of the target language without the intervention of any explicit instruction. It is an old approach which had been used before the late 19th century. On the contrary, the latter approach, an

analytic-linguistic approach focuses on utilizing information and tools such as phonetic alphabets, articulatory description and contrastive information to supply learners' ability in listening, imitation, and production (Celce-Murcia et al., 1996). There are many kinds of techniques and materials that teachers and linguists try to integrate and develop in order to support the Communicative Approach. According to Celce-Murcia et al. (1996), techniques that have been used and still being used are the following:

1. *Listen and imitate* : The teachers provides models of sounds and students have to repeat or imitate their teachers.

2. *Phonetic training* : With this technique, students have to learn how to pronounce by studying the phonetic alphabets, articulatory diagrams and articulatory descriptions. They also have to read the phonetically transcribed text.

3. *Minimal pair drills* : This technique has been used to help students to distinguish between two similar problematic sounds by listening to discrimination and speaking practice. This technique usually begins with word-level drills, then moves on to sentence-level drills.

4. *Contextualized minimal pairs* : This technique has been developed by Brown (1975) in an attempt to fulfill the lack of meaning and context in minimal pair drills. Teachers have to present key vocabulary and then train students by encouraging them to respond to the correct word by guessing the contextual clue in the sentence.

5. *Visual aids* : The teacher uses audiovisual aids such as sound-color charts, pictures, rods to describe how the sounds are produced. This technique is usually used in the state of production.

6. *Tongue twisters* : This technique comes from the speech correction strategies for native-speakers.

7. *Developmental approximation drills* : This technique is based on the theory of

first language acquisition which says that native speaker children usually acquire certain sounds before another. For instance, they often acquire /w/ before /r/ or /y/ before /l/. Hence, in teaching non-native speakers to learn the L2, teacher have to teach by retracing the steps that the L1 speakers acquire their first language.

8. *Practice of vowel shifts and stress shifts related by affixation* : The teacher points out the rule-based nature of vowels and stress shift to raise students' awareness.

9. *Reading aloud/recitation* : The teacher gives passages or scripts to students to practice and read aloud, focusing on stress, timing, and intonation.

10. *Recording of learner's production* : The teacher uses audio recorder or videotapes to record spontaneous speeches, free conversations, and role plays and then playback for teacher and peer feedback or self-evaluation.

When the Communication Approach began to be a trend in teaching L2, the techniques which focus on segmental level were shifted to suprasegmental one. However, the weight between segmental and suprasegmental teaching has been balanced (Celce-Murcia et al., 1996). This point of view in teaching pronunciation recognizes that both inability to distinguish segmental and suprasegmental features are main problems that impact the communication of L2 students. Therefore, many researchers have stressed the importance of teaching techniques that could be used to help students improve their pronunciation skills (Carruthers, 2007; Demirezen, 2010b; Hazan et al., 2005; Rolland, 2009). In the following section, Some interesting pronunciation teaching techniques will be discussed.

Inventory pronunciation teaching models

Recent pronunciation teaching models that have been invented to help students overcome English pronunciation sounds include "Audiovisual Perceptual Training",

"Articulatory Training using Webcam Pronunciation Mirror" and "Audioarticulation Model". Each model involves different pronunciation techniques. Hazan et al.(2005) uses audiovisual perceptual training to examine the perception of a novel phonemic contrast of Japanese students. This method combines minimal pair and visual aids techniques to investigate Japanese students' pronunciation of novel phonemic pronunciation and also compare the audiovisual technique with auditory training. Hazan et al.(2005) found that audiovisual perceptual training is successful both in drawing attention of the participants to the visual modality and in attracting their attention to the specific visual cues marking the contrast. Similarly, Carruthers (2007) proposes "Articulatory Training" by using articulatory gestures involving facial movements to improve the pronunciation of /w/ and /i/ & /iy/ in contrast. He used phonetic training technique and visual aids techniques to train L2 students for 20 minutes. He used hand mirror to monitor his participants while practiced such sound. Then, he recorded his participants' production for self-, peer, and teacher feedback. The result indicates the significant improvement in pronunciation of the sample. However, Carruthers(2007) suggests that a further study should extend a period of time in order to give the learners more exposure to the stimulus and an opportunity to receive more training and feedback.

Among various studies, I have found some interesting studies in Turkey which combine the Audiovisual Technique, the Articulatory Gestures, and the Interaction technique into a new model. The so-called "Audioarticulation Model" has been developed by Prof. Dr. Mehmet Demirezen in order to treat English fossilized pronunciation in adult learners. It is combined listening and imitating, phonetic training, minimal pair drills, contextualized minimal pairs, visual aids, tongue twisters and reading aloud techniques to help adult learners overcome their erroneous pronunciation especially at segmental level. He claims that in order to treat the erroneous pronunciation, the

class time should be extended to at least 50 minutes. This idea is conformed to the suggestion of Carruthers (2007) who suggests that researchers should provide at least 20 minutes of the pronunciation training. After trying for several years (Demirezen, 2010a, 2009, 2008, 2007a, 2007b, 2006, 2005b, 2005a), Prof Dr.Demirezen found that the Audioarticulation Model can bring his trainees close to a standardized international intelligible pronunciation. The audio articulation method will be discussed in the following section.

Audioarticulation Model

Since the mastering of L2 language pronunciation of L2 students is hard to achieve, many researchers are trying to come up with strategies to help students untangle the problems. Interestingly, Prof. Dr. Mehmet Demirezen, a professor of linguistics at Hacettepe University in Turkey has invented a model to treat the fossilized pronunciation errors in Turkish adult students. He terms his model "the Audioarticulation Model (AAM)". The AAM has been successfully used in teaching and treating fossilized pronunciation in the adult Turkish students of English (Demirezen, 2010a, 2009; Hismanoglu, 2009; Demirezen, 2008, 2007a, 2007b, 2006, 2005b, 2005a). Demirezen (2010b) claims that this method is designed to fill the gab in the field of pronunciation teaching. He explains that the Audioarticulation Model is based on the analytic-linguistic approach which involves micro-listening and speaking, macro-listening and speaking activities in terms of automatic speech recognition and production exercises. According to Demirezen(2010b), there are five stages for the working mechanism of the AAM.

1. Identification of a problematic problematic sounds of the target language for the non-native of the target language. This stage is to identify the problematic sounds of L2 students by using diagnostic tests.

2. Preparing a corpus of 50-100 words including the problem causing sounds and its nearest pairs. This stage aims to prepare the corpus for teachers and students to use in micro-listening to correcting and practicing pronunciation in order to understanding fast, fluent conversational skill in real life situation.

3. Singling out minimal pairs from the corpus. Each minimal pair can be picked up and treated to cure the pronunciation mistakes. The teacher handles students in neuromusculary oriented, imitation, repetition, and exhortation-wise experimental practices to control pronunciation. The students have to practice listening comprehension skills and listening discrimination exercises and do the guided oral production practice.

4. Developing proper tongue twisters, proverbs, idioms, mottoes, or cliche expressions in chunks for classroom practice. The humorous tongue twisters and incorporating idioms, mottoes, or cliche expressions are prepared to be used as a source of practicing exercises. In addition, teachers have to create a contrast across two sentences. It is called paradigmatic drills, or in the AAM it is called minimal sentences. These practicing exercises are used to raise students' awareness in articulation, listening attention on streams of oral practices.

For example:

Don't SLIP/SLEEP on the roof.

Please FEEL/FILL it.

The next drill which the teacher has to create is syntagmatic drill. It is a creation of phonemic contrast within a sentence. In AAM termed as sentences with contextual clues. Here are some examples:

Don't SIT in that SEAT.

Can your LIP LEAP ?

5. Doing further awareness raising and experiential practices within a suitable methodology. The systematic exercises, which are production exercises, recognition exercises, phonemic discrimination actives and drills, minimal pair practice, and listening discrimination, are required to control automatic pronunciation mechanism. The minimal sentences, sentences with contextual clues and concentrated examples are the very powerful practices to equip a context for improving pronunciation and also create a relaxed atmosphere in a conductive learning (Demirezen, 2010b). In addition, in larger stream of utterances in practices like minimal sentences, contextual clues, adding asking questions can promote the student's macro-level strategies. They offer them an opportunity to develop the meta-cognitive skills and it can be used as a basis for connection between listening and speaking activities in class. Such exercises, then, can create a noticeable impact on modifying the speech of each students towards increased pronunciation intelligibility (Demirezen, 2010b).

Related research

Several studies have been conducted on English pronunciation. Rasmussen and Zampini (2010) have investigated the impact of phonetics training on the intelligibility and comprehensibility of native Spanish speech as perceived by L2 learners. The study demonstrates that phonetics training can help L2 learners improve their listening comprehension skills. In the same vein, Hismanoglu (2009) investigates the effectiveness of Audioarticulation Model in rehabilitating inter-dental sounds of Adult Turkish students. He found that his students benefit from Audioarticulation Model. They are very active and cooperative during the application in the classroom. The study concludes that the Audioarticulation Model can help Turkish students of English overcome their problematic inter-dental pronunciation.

In Thailand, many studies have focus on how to help Thai students overcome problems in pronunciation. Phoprai (2008) uses language games to solves problems with English word final cluster of two consonant sounds. He found that his students' pronunciation abilities were significantly improved through pronunciation games. Another research has done by Yangklang (2006), she uses computer-assisted instruction (CAI) program to improve English final /l/ pronunciation of Matthayom Suksa 4 students. The study shows that the students could improve the pronunciation of /l/ sound significantly after they used CAI program. The last interesting research is done by Varasarin (2007). He investigates the use of pronunciation training and language learning strategies in improving students pronunciation and spoken intelligibility. This research contains two cycles. First, the researcher trains five teachers using the pronunciation training and language learning strategies. Then, these teachers were assigned to teach a group of four students each and similar improvements are observed. The study shows that the training has a great impact on the improvement and confidence of both teachers and students. Teachers reported that their intelligibility had improved and they were able to self-correct. For students, they showed the improvement in their speaking competence and also had the ability to self-correct using a dictionary as a reference to check whether their pronunciation was accurate.

In summary, we can conclude that problematic sounds for Thai students are mainly sounds that do not occur in Thai system. The major group of problematic sounds lies in the fricative manner of articulation. The mother tongue interference and the attitude toward English speaking are two main points that influence Thai students' language learning. In addition, the lack of pronunciation skills of the teachers and the limited time of pronunciation practice in the classroom are external influences that contribute to Thai students' pronunciation problems. Since the goal of English learning

is to be able to intelligibly communicate and the correct segmental pronunciation can help students to succeed; the teacher should pay more attention to help students to overcome their segmental errors. Kendrick (1997) suggests that pronunciation training can produce positive effects on pronunciation in a reasonably short period of time. The AAM pronunciation training is worth investigating because it can help and improve the problematic sounds of adult learners in Thai context. The preceding background leads directly to two research questions for this study 1) Can the Audio Articulation Method can improve fricative problematic sounds of adult Thai students?, and 2) How was the audio articulation method experienced by adult Thai students? My lesson plans which are main experimental instruments will be based on the Audioarticulation Model (AAM) of Prof. Dr. Demirezen (2010).
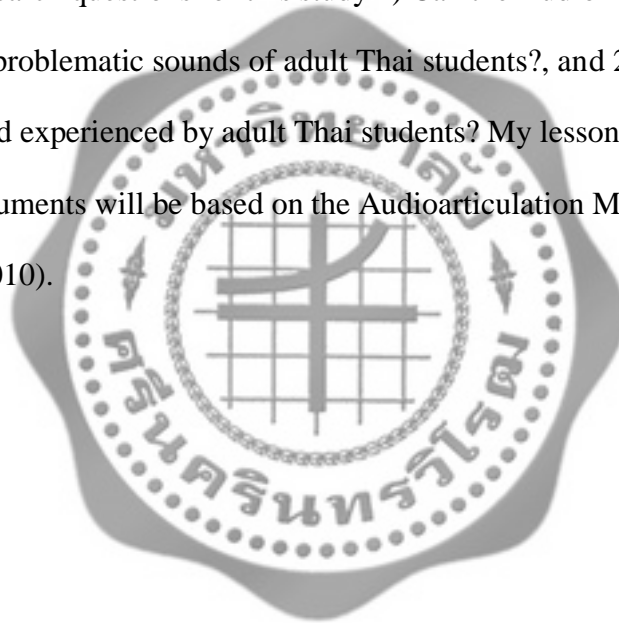
CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the methodology employed in collecting and analyzing the research data. It is divided into five parts: research design, research participants, research instrument, data collection, and data analysis procedures.

Research design

Bogdan and Biklen (2007) claimed that a smaller amount of sample provide a better opportunity for researcher to observe the sample's behavior changing toward the research's tools deeply. According to Chatranonth (2007), there were rare educational case study research in Thailand. Therefore, in determining the role of the Audioarticulation Model in improving English pronunciation of fricative sounds, the case study design was employed as methodology because it can well present real situation and allow generalizations to be made. The result of this case study provide clear understanding of how the Audioarticulation Model effected students' performances and perceptions.

The process of the case study design were as follow.

1. All eight students were taken the pre-pronunciation test.

2. The score of all eight participants were compared. The participants who gained the highest, middle and lowest scores were selected to be the three nested case.

3. Eight participants took the 12 weeks of AAM pronunciation course and kept doing the learning logs.

4. All prticipants took the post-pronunciation test and did the questionnaire.

5. Eight participants pronunciation scores, questionnaires and learning logs were

analyzed.

      6. Three nested case participants scores, questionnaires, learning logs and research journals were analyzed in dept.
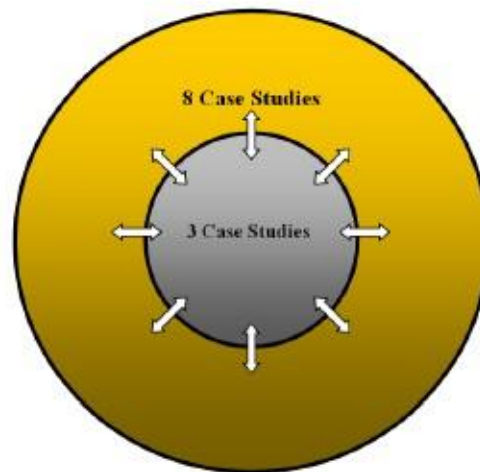
Figure 3. Relationship between Whole Case and Nine Nested Case Studies

      The diagram below illustrated the relationship between these two components. They were intimately related since the nested cases are used to shed light on the whole case and vice versa. Hence, they were mutually informing. In this regard, Stake (2003) explains that even though there was a possibility that selected students might demonstrate different beliefs or perceptions, it was held that understanding such differences would foster better insight about the large collection of cases. Hence, I argued that looking at the similarities and differences between the three students can give a fuller picture and lead to a better understanding of the whole case.

Research participants

      Population

      The population of the study was the third year English Education students at Chiangmai Rajabhat Universiy, Chiangmai in the academic year 2010. The total number

is 58. The population was to pass ENG 1101 Linguistic and ENG 1103 Introduction to Phonetics, the fundamental of linguistic and phonetic courses, to ensure that their erroneous pronunciation was not the result of their lack of English pronunciation knowledge.

Sample

The group of participants targeted by this research includes eight English Education students at Chiangmai Rajabhat University, Chiangmai. The participants were selected by using a voluntary basis technique.

Research instruments

The following instruments were used in this study.

Lesson Plans

The lesson plans used this study consisted of theoretical and practical parts which were based on an audio-articulation methodology by Demirezen (2010b). Each lesson lasted for about 50 minutes. The belows describe the lesson plan construction process.

The literaly regarding an Audioarticulation methodology by Demirezen (2010b) was reviewed to indentify fricative sounds that are problematic to Thai learners. A corpus of 50 to 100 words of the problem causing sounds was prepared using Pronunciation contrasts in English by Don L. F. Nilsen and Alleen Pace Nilsen (1973). The minimal pairs from the corpus were singled out. Pronunciation exercises were developed consisting of proper tongue twisters, proverbs, idioms, and expressions. The exercises were from Pronunciation Contrasts in English by Don L. F. Nilsen and Alleen Pace Nilsen (1973) and Ship or Sheep by Ann Baker (2007). All exercise was recorded by a

native speaker of English who got Master degree from Georgetown University.

Pronunciation Test

This pronunciation test contained lists of vocabulary that contained fricative sounds [v],[T],[ð],[z],[S], and [Z] which had been taught in the training course. The test was used as pre-test and post-test to compare the participants' performances before and after the course. All of the pronunciation test was constructed by the researcher in order to measure the progress of the students during the AAM based pronunciation training course (see Appendix A). Pronunciation test was divided into three sections; Part (A) contained 36 words list, Part (B) contained 6 sentences, and Part (C) contained a paragraph reading in order to test students' pronunciation performance authentically when the problem sounds appear in words, sentences and the paragraph. The total score was 96. The test was verified by a native speaker of English to ensure pronunciation correctness. Then three experts in the field of English language instruction and linguistics were verified the content validity of pronunciation test.

In conducting the test, the participants were asked to pronounce words and sentences in the test aloud. Their pronunciation test were recorded.

Questionnaire

The questionnaire aimed to investigate the participants' attitude toward the course (see Appendix C). The questionnaire was divided into four main parts. The first part drew the profile of the participants in terms of gender, age, number of years in studying English, and the degree of exposing to English language. The second and third parts allowed participants to rate their attitude toward English pronunciation and the AAM based training course respectively. The last part contained two open-ended questions for

the participants to give any additional opinions and suggestions for the training course. To ensure the participants' clear understanding of the questionnaire, the questionnaire was translated into Thai (See Appendix D).

Learning log

The learning log was employed to explore the participants' experiences during the training course. At the end of each class, participants were asked to complete the learning log (See Appendix F). In the learning logs, they made notes about their learning experiences. Then, the participants handed in the learning logs to the researcher in the following class.

Research journals

The research journals were employed to record the three nested cases' behavior. During the class, the teacher observed and made note about the three nested cases' behaviors and learning styles toward the class individually.

Data collection

The researcher obtained a permission to conduct the study from the Director of English Division of Chiangmai Rajabhat University. The study took place in the third semester of the academic year 2010. The training was lasted for 12 weeks.

Quantitative data collection

The pronunciation test was used as pre-test and post-test. The participants were asked to pronounce words and sentences in the test aloud while the qualified native speaker and the researcher were given the scores (see Appendix B). In addition, a researcher's assistant video taped of participants as they were performing the task.

The second and third of the questionnaire aimed to gain information on students' attitude toward the training. At the end of training, the participants were asked to indicate their degree of agreement or disagreement with each item with five point Likert Scale ranging from 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree.

Qualitative data collection

In order to gain students' opinions on the Audioarticulation Model, the open-ended questions which are in the forth part of the questionnaire will be given to students at the end of course. Therefore, they can give their opinions and suggestions toward the training freely.

Data analysis

Quantitative data analysis

In this study the researcher adopted the data analysis procedures of Hismanoglu(2009). The collected data was divided into three categories: (a) speech sound produced correctly, (b) speech sound produced incorrectly, and (c) speech sound that was not produced. In order to evaluate the performance of students' pronunciation, the researcher gave one point for the speech sound that produced correctly and gave zero for the incorrect sound and not produced sound. To come up with the final score, the researcher asked the native-speaker of English who was teaching English in Srinakarinwirot university to be a judge. The researcher and the native-speaker of English judge were compared the scores. Then Mann-Whiney U Test was used to detect the score to see the students' progress. In order to investigate the students' attitude toward the pronunciation and the AAM based pronunciation training course, the students's responses were tallied and qualitatively

analyzed.

Qualitative data analysis

In order to see the perception and students' experiences, the case study design was employed. It had two components; the whole case analysis and the three nested cases. The purpose of the whole case analysis was to offer an overall picture regarding the perception on Audioarticulation Model in improving the students pronunciation of English fricative sounds. The attitude toward the AAM training course from the second and third parts of the questionnaire and the students' comments and suggestions from the fourth part of questionnaire were categorized and put into groups. The data was interpreted for analyzing the effectiveness (or the lack) of the AAM training course in Thai educational context. The open coding system (Strauss & Corbin, 1990) was used as a guideline for the analysis. Then, three participants were purposive selected to be nested cases and individually analyze to see how the students engage with the AAM.

CHAPTER IV

FINDINGS

The purpose of the study was to measure the effectiveness of the Audioarticulation Model(AAM) in improving students' pronunciation of fricative sounds in English. This chapter presents the findings of the study. The results are presented in response to the research questions.

Research Question 1: *Does the Audioarticulation Model improve the pronunciation of fricative sounds: /v/, /T/, /ð/, /z/, /S/, and /Z/ of third year students at Chiangmai Rajabhat University?*

In response to this research question, the participants were asked to take a pre-test and post-test by reading aloud from a list of vocabulary and sentences that contained the target sounds. Their pronunciation was recorded. The researcher and a native speaker of English at a university lecturer at Srinakarinwirot University listened to the recordings and evaluated the participants' pronunciation. Mean scores were calculated from the two sets of scores obtained by the researcher and the native speaker. The average scores of the pre-test and post-test were then compared. Below is the table the comparison of students' pronunciation test scores including the mean score and the Standard diviation.

Table 1: Comparison of Students' pronunciation Test Scores

Score	Students								x	S.D
	S.1	S.2	S.3	S.4	S.5	S.6	S.7	S.8		
Pre-test	32	20.5	19.5	27.5	50.5	19	38.5	27.5	29.37	10.14
Post-test	67	37.5	50.5	62	84	51	68.5	54	59.31	12.72

The study revealed that the U value obtained from the U-test statistics was 13 which was lower than the critical value in the table of Critical Values for the Wilcoxon/Mann-Whitney Test (p<.05) (See Appendix G). This finding suggests that students significantly improved their pronunciation of fricative sounds after attending the pronunciation course. The AAM had a positive impact on the participants' pronunciation of fricative sounds.

The Table 1 shows the average scores of correct fricative pronunciation before and after training; all participants gained higher scores after taking the training course. The highest pre-test and post-test scores were 50.5 and 84, respectively. Mean score of pre-test was 29.37 and post-test was 59.31. The standard deviation were 10.14 and 12.72, respectively. The analysis of the three nested case found that, the first participant earned 27.5 scores in his pre-test and 62 scores in the post-test. The second gained 19.5 scores in pre-test and 50.5 in the post-test. The last nested case got 50.5 at pre-test and rose to 84 as the post-test. This significant improvement was affected by several factors that will be discussed in the next chapter.

Research Question 2: *What are the students' perceptions of the integration of the Audioarticulation Model in a pronunciation classroom?*

At the end of the training course, all participants were asked to complete a questionnaire. The questionnaire was divided into four important parts. The first part focused on the participants' profiles. The second part consisted of five questions concerning English pronunciation. It aimed to elicit information regarding the participants' opinions toward the study English pronunciation. The third part contained 10 questions about the Audioarticulation Model. It aimed at getting the participants' opinions toward the Audioarticulation Model. The last part contained three open-ended questions about the pronunciation course that was based on the Audioarticulation Model. It allowed

the participants to give feedback or comments about their learning experiences. The participants' perception on the study of English pronunciation and the Audioarticulation Model were presented in Table 2.

Table 2. Learner's perception on pronunciation and Audioarticulation Model

Questionnaire Items	Scores
Part 2 : The learner's opinion toward English pronunciation.	
1. Correct English pronunciation is important to me.	4.75
2. I would like to achieve a native-like pronunciation.	4.5
3. I practice to pronounce like native speaker.	3.875
4. To achieve the correct English pronunciation, the very hard practicing is important.	4.75
5. I think English teacher should give more attention to pronunciation skill in classroom.	4.75
Part 3 : The learner's opinion toward the Audioarticulation Model.	
1. The drill activity can improve my correct pronunciation.	4.62
2. The minimal pair activity can help me to discriminate the sounds more correctly.	4.62
3. The tongue twister activity improves my awareness of English pronunciation.	4.37
4. 50 minutes of teaching pronunciation in each class is appropriate for practicing the problem sounds.	4.5
5. The teacher's explanation about how to use the place of articulation to pronounce a sound helps me to understand and pronounce the sound correctly.	4.62
6. After attending the course, I have much understanding about how to pronounce the English sounds.	4.62
7. After attending the course, I feel more confident when speaking in English.	4.25
8. At the end of the course, I can change my erroneous English pronunciation.	4
9. I like the Audioarticulation Model	4.62
10. If I am English teacher, I would like to apply the Audioarticulation Model into my classroom	4.75

The result clearly demonstrated that most of the participants agreed that correct pronunciation was important (x= 4.75). They believed that to improve their own pronunciation, they had to practice a lot (x= 4.75). In addition, they agreed that the teacher should pay more attention to each student's pronunciation (x=4.75).

With regard to the participants' opinions toward the Audioarticulation Model, it was found that the drill exercises, minimal pair practices and teacher's explanation about place of articulation were techniques that help the participants to improve their pronunciation. Item 6 which showed an average score of 4.62 indicated that all participants agreed that the Audioarticulation Model can help them to develop their pronunciation accuracy.

The questionnaire also revealed that games for pronunciation practice and listening & discrimination exercises were the most favorite activities of all. The tongue twisters and the listening & repeating vocabulary practice were secondly preferred activities. However, both tongue twisters and the listening & repeating vocabulary were also the least preferred activities for some participants.

According to the three nested cases, the first participant believed that pronunciation was important and he needed to improve his pronunciation a lot (x= 5). Minimal pair sound was his most favorite activity. He had more confident to speak English (x= 5). He mentioned that the AAM pronunciation course was very good because he could apply techniques to use in the real life. The second participant's questionnaire revealed that she believed that to achieve the correct English pronunciation, the very hard practicing is important (x= 5). She also needed to pronounce native-like pronunciation as much as possible (x= 5). According to the perception toward the AAM, the most favorite activities of the second participant were minimal pair practices activity and how to use the place of articulation in order to pronounce a sound activity (x= 5). She suggested that she had problem with /r/ and /l/ sound so she would like to practice such sounds through the AAM. The last nested case's questionnaire showed that she was aware of the correct pronunciation. She agreed that pronunciation was important and needed to improve. She also agreed that teacher should gave more attention to pronunciation skill

in classroom (x= 5). The questionnaire about the opinion toward the AAM revealed that the third participant liked drill activity, minimal pair practices, and how to use the place of articulation to pronounce a sound (x= 5). She mentioned that she had a bit worry when practicing tongue twister. In addition, if the listening and repeating vocabulary was more that twice time, sometime it would made her bored.

Research Question 3: *How did the students experience the integration of the Audioarticulation Model in a pronunciation classroom?*

During each week of the study, each participant completed a learning log and returned it to the instructor. The analysis of the learning logs revealed that the participants had positive attitudes toward the AAM. It is perhaps not surprising that all of them enjoyed practicing pronunciation through games. The participants believed that they were more aware of the importance of correct pronunciation. Moreover, half of them indicated that they could recognize their own pronunciation mistakes and know how to correct them after taking this course. Interestingly, they noted that this course changed their perception toward learning pronunciation. They commented that they did not think that learning pronunciation could be fun until they took course. They stated that they had a much better comprehension of English pronunciation system.

Base on the nested cases' learning logs, the first participant noted that he was happy during the course. He was more confidence to speak English after taking the AAM course. He also mentioned that he had more opportunities to practice his listening skill than other pronunciation courses. The second participant commented that this AAM course help her improve English pronunciation. She believed that she could discriminate the minimal pair sounds more easily. In addition, she was more aware of pronouncing English sounds. The last participant mentioned that pronunciation games was very fun for her. Moreover, she realized that she should listen to English music or movie more in order to improve her

listening skill.

In conclusion, the AAM can significantly improve their pronunciation of fricative sounds ($p<0.05$). Most of them had positive attitudes toward AAM. They were also more aware of the significance of correct English pronunciation. However, to clearly understand the cause-effect relationships of the AAM and the students' performance, the discussion of major findings is presented in the next chapter.

CHAPTER V

CONCLUSION AND DISCUSSION

The objectives of this study were to measure the effectiveness of the Audioarticulation Model (AAM) in the Thai context and to investigate whether the Audioarticulation Model could improve students' pronunciation of fricative sounds. The study also focused on how Audioarticulation Model (AAM) were experienced by eight third year university students majoring in English at Faculty of Education at Chiangmai Rajabhat University. This chapter presents discusses of the major findings including three nested cases and conclusions of the study. Implication of the study and recommendations for further study are also included.

Research questions

This study aimed at answering three main research questions.

1. Does the audio-articulation method improve the pronunciation of fricative sounds: /v/, /T/, /ð/, /z/, /S/, and /Z/ of the third year students at Chiangmai Rajabhat University?

2. What are the students' perception of the integration of the Audioarticulation Model in a pronunciation classroom?

3. How did the students experience the integration of the Audioarticulation Model in a pronunciation classroom?

Population and sample

The population in this study was 58 third year students majoring in English at Faculty of Education at Chiang Mai Rajabhat University who passed ENG 1101

Linguistic and ENG 1103 Introduction to Phonetics which were the fundamental of linguistic. The sample of this study included eight third year students recruited through voluntary selected technique.

Research instruments

The instruments used in this research were:

1. Lesson plans based on Audioarticulation Model

2. Pronunciation test

3. Questionnaire

4. Learning logs

5. Researcher journals

Research methodology

In order to measure the effectiveness of the Audioarticulation Model on improving the students' pronunciation of fricative sounds, the pronunciation test was constructed (See Appendix C). The test was revised by two experts who were the university lecturers in the Department of Linguistics at Srinakarinwirot University and the other expert who is a university lecturer in Faculty of Humanity at Chiang Mai Rajabhat University. All instrument were piloted with six third year English major students.

To uncover the students' attitude toward the Audioarticulation Model, the questionnaire and the learning logs were used as additional research tools. Both tools were revised by three experts in field of linguistics (See Appendix D and E respectively).

Conclusion and discussion of the findings

Research Question 1: *Does the Audioarticulation model improve the the pronunciation of fricative sounds: /v/, /T/, /ð/, /z/, /S/, and /Z/ of the third year students at Chiangmai Rajabhat University?*

It was found that the participants' pronunciation of fricative sounds was improved after attending 12 pronunciation training classes. That was significant at the $p<0.05$ level. According the pronunciation test scores of the three nested cases, it was found that all three nested cases' pronunciation scores were improve. The first participant gain 27.5 scores in his pre-test and 62 scores in the post-test. The second gained 19.5 scores in pre-test and 50.5 in the post-test. The last nested case got 50.5 at pre-test and raise to 84 as the post-test. The scores showed that the AAM could improve both the hight proficiency student and low proficiency students. The result implied that the Audioarticulation Model could help students in every level of proficiency improve their erroneous English pronunciation of fricative sounds. To explain this research result, three facts can be discussed.

First, class allocated in each week supported students' learning. Spending around 2 hours per week, participants were probably familiar with the target sounds. They got involved in repetitive practices. Therefore, it helped them to increase the degree of using the target sounds. This is relevant to Jesry (2005) who claimed that the degree of exposure and the use of the target language can support pronunciation skill development.

Second, the techniques employed in training provided participants with more opportunities to practice the fricative sounds. In each class time, participants had to practice the target sounds through various techniques such as minimal pair drill and discrimination, songs, and pronunciation games. They had to practice listening and speaking, both individually and as a whole class. It could assume that those techniques

helped the participants improving their English fricative sounds.

Finally, the sequences of each technique could support the nature of learning development. According to information processing theory by Rumelhart and Norman (1978), there are three stages of learning. The first one is accretion mode or adding new information which is similar to the state of listening to and repeating new vocabulary in AAM pronunciation course. Then, the restruction mode which allows students to recognize and create the new patterns. It was similar to the stage of practicing target sound by using tongue twisters. The last mode is tuning which allows students to modify and create the information more accurately. Using games or songs can facilitate the flow of this stage.

In conclusion, the Audioarticulation Model had a positive effect in improving the pronunciations of the participants. The AAM can improve the pronunciation of fricative sounds: /v/, /T/, /ð/, /z/, /S/, and /Z/ of the third year students at Chiangmai Rajabhat University.

Research Question 2: *What are the students' perception of the integration of the Audioarticulation Model in a pronunciation classroom?*

This study investigated students' perception of the AAM. This type of perception was related to both their English pronunciation and how they viewed the AAM. All participants agreed that pronunciation was important and they needed to improve. The importance of the positive attitude toward the English pronunciation was demonstrated by the fact that all participants were English Education students. Therefore, they seemed to have clear goals to achieve the good English pronunciation. In addition, they had instrumental motivation (O'Grady et al., 1997) because they are going to be English teachers. In order to prepare for good teachers, the pronunciation skill was concerned as their prior skill needed improving. The learning log revealed that the participants

believed that good English pronunciation skill can develop them to be good teachers. This is supported by the claim of O'Grady et al. (1997) who suggested that students with instrumental motivation can be successful if they have high level of motivation.

In determining the perception of AAM, it was found that all participant feel positive toward using AAM in class. They believed that the techniques and activities such as drill, minimal pair sound comparison and tongue twisters could help them improve their pronunciation. A reason for this positive opinion might be the use of different techniques. During the training, the researcher applied many drill techniques to use in each activity. The participants had chances to listen to and repeat words and sentences. They had to rearrange tongue twisters sentences, discriminate minimal pair sounds and play pronunciation games. The researcher noticed that all participants paid attention to both individual and whole class activities. Moreover, it was found that many activities such as tongue twisters and the pronunciation games were very good activities that provided participants with chances to organize their correct fricative sounds more spontaneously. It conformed to the suggestion of Demirezen(2010b) who suggests that the Audioarticulation Model can bring the trainees close to a standardized internationally intelligible pronunciation. In addition, most of the participants suggested that they would like to apply these techniques into their future classes. It might be because they were happy to learn pronunciation through this type of training. Consequently, they would like to apply this model into their class.

It was supported by the analysis in the three nested cases. During the 12 course, the first participant always paid attention to every class activity, and did not hesitate to follow instructions. This supports Ellis (1995) who noticed that a positive attitude toward L2 can enhance language learning. Another important factor was the student's motivation to achieve the pronunciation skill. When being asked to pronounced the target

sound individually, the first student usually paid attention to his friends' pronunciation and compared his with his friends' sound in order to check the correctness. He focused on his ability. It was similar to the third participant. During class-time, she always paid more attention to the lesson than her classmates. She usually expressed what she thought was important for her future career. She said that English was her favorite subject. Her questionnaire revealed that she thought that the English pronunciation was important and needed to improve. These evident confirmed the claim that students with motivation can also be successful if they have high level of motivation (O'Grady et al., 1997). In addition, minimal pair sounds activities and listening and discriminating sounds were her most favorite activities. Therefore, she note that she was fun during every class.

The second participant, on the contrary, was one of the weakest students in the course and seemed to be shy and had less confidence at the beginning. She usually received more attention from the researcher in order to arouse her pronunciation skill. She needed encouragement to speak louder or repeat the target sound once. However, later on, she suggested that the activities provided her more opportunities to practice the target sound.

In conclusion, it can also confirm that all participants had positive attitude toward the Audioarticulation Model.

Research Question 3*: How do the students experience the integration of the Audioarticulation Model in a pronunciation classroom?*

To examine the participants' experiences through the training course based on the Audioarticulation Model, the researcher asked them to keep writing learning logs and handed them in before the following class. The three nested cases were purposive selected to see how each of them viewed achievement on integrating the AAM in the pronunciation course. As a whole class, all participants were satisfied with the course.

Many participants' responses in learning logs indicated that the pronunciation course helped them realize the importance of pronunciation and develop their pronunciation skills. Learning pronunciation intensively for 50 minutes was viewed as effective. The extended time provided the participants' opportunity to consider, familiarize, and practice the target sounds. In addition, the participants noted that they clearly understood how to pronounce the fricative sounds and how to pronounce the target sounds more easily. In each class, the participants started learning two contrasting minimal sounds. Then they learned how to differentiate two similar sounds. As the result, they could seize the specific characteristic of each sound, and then pronounce it more easily. This assumption is supported by the claim that various systematic exercises can create a noticeable impact on modifying the speech of students towards increased pronunciation intelligibility (Demirezen, 2010b). Furthermore, the pronunciation games were the most effective tool to encourage their learning and practicing the target sounds. Most participants suggested that this training course was more interesting than the previous pronunciation course that they had learned. They also claimed that they were happy and had fun during the class because they could play and learn the English pronunciation at the same time. This perspective was in accordance with Phoprai (2008) suggestion that students' pronunciation abilities were significantly improved through pronunciation games and other kinds of fun activities.

With regard to the three nested case, the first participant noted he was happy during the course. He believed that this pronunciation course helped him distinguish two similar sounds. He believed that he had more confidence to pronounce the fricative sound after learning this course. Moreover, he noted that activities in this course raise his long term memory. Through these activities, he learned by doing. However, he commented that this course should be extended longer than 12 weeks and include other problematic

sounds both consonants and vowels. This comment implied that the improvement of pronunciation probably enhanced his motivation, and his positive attitude towards English pronunciation and AAM training course.

It was similar to the second participant. Her learning logs revealed that she was always aware of her pronunciation and checked her improvement after learning each class. She noted that she had problems listening and pronouncing words when the target sound was in the middle position. However, later on, she suggested that the activities provided her more opportunities to practice the target sound. At the end of the course, she believed that she had more confidence to pronounce English sounds and had more awareness of using or pronouncing English fricative sounds. This evident showed that the activities can promoted her pronunciation skill, and her self-evaluation assisted pronunciation improvement.

The third participant also added that the course helped her understand how to discriminate two similar sounds that helped her pronounce such sounds correctly. Moreover, she had realized her weak listening skill after doing the listening and discriminating activity. These can be inferred that learning a pair of sounds in contrast can help students to achieve the good pronunciation skill rather than teaching the only single sounds per class time.

In conclusion, it seems clear that the longer period of time students spent in each class positively affected good attitude toward learning how to articulate English pronunciation of fricative sounds. The positive environment due to the activities also had benefits in term of participants' awareness and perception. The analysis of participants' learning logs clearly revealed that the teacher techniques using in class played an important role in the pronunciation development and the perception of the participants. In addition, it was important not to overlook the participants' personalities. Three nested

cases revealed that the role of personality could arouse the students' attention and cooperation in class.

Limitations of the study

This study has revealed that the Audioarticulation Model was proved to be effective in helping the third year English students improve their English pronunciation. However, there were at least three limitations that may have affected the research results.

1. The participants were chosen by using a voluntary basis technique. The researcher was not able to specify their baseline English proficiencies and articulation skill.

2. This research was a case study and the results were not intended to be generalized.

3. This course was an extra pronunciation course designed for these students only which was taken in summer semester. If the course and materials are adopted to use with other groups of students to cover a longer period of time, the results may be different from the finding in this study.

Implications of the Study

The lesson plan, based on Audioarticulation Model, for improving problematic fricative sounds

1. The AAM can be used to train other groups of adult Thai students and also EFL English teachers who have problems producing fricative sounds in order to improve their pronunciation skill and raise their awareness of correct pronunciation skill.

2. The AAM can apply to teach other consonants and problematic vowels sounds in adult pronunciation classes. For elementary and secondary classes, each lesson plan

should be simplified and divided into 2-3 periods of 50 minutes.

3. The results of the study can apply to improve the pronunciation course for university students.

Suggestions for further studies

Before apply the AAM based pronunciation course to use, teacher should recognize the learners' fundamental knowledge in order to be able to choose pronunciation exercises which that best suit the learners' proficiency level. Moreover, the AAM based lesson plan should be divided into two or three class due to the students' level. In the presenting the corpus or tongue twister sentences activities to students, the teacher should provide them the meaning of word or sentences which would raise the activities more meaningful. Furthermore, some learner felt shy about pronouncing the target sound in front of class, the groups' activities can help them practice more comfortably.

The Audioarticulation Model helped the participants to improve the pronunciation of English fricative sounds. It may be useful for teachers and other interested in using the AAM to teach other consonants and vowel sounds because it is not only /v/, / θ /, /ð/, /z/, /s/, and /z/ that are problematic sounds for Thai students but /ô/, /@/ or /Ù/ are also considered as severe problematic sounds (Jukpim, 2009). Moreover, the participants of this study were university students that can be considered adult learners. According to Florez (1998), older and younger students have different background experiences but they have the same capacity in learning. In the similar vein, when the AAM can improve adult learners, it should have positive effect on younger students. The using AAM in younger learner should be conducted to the effective.

References

Abramson, A. S., & Tingsabadh Kalaya. (1999). Thai final stops: Cross-Language perception. *Phonetica*, 56(3-4), 111–122.

Baker, C. (1988). *Key issues in bilingualism and bilingual education*. Multilingual Matters Ltd.

Bent, T., & Bradlow, A. R. (2003). The interlanguage speech intelligibility benefit. *The Journal of the Acoustical Society of America*, 114, 1600–1610.

Bogdan, C., & Biklen, K. (2007). *Qualitative research for education: an introduction to theories and methods*. New York: Pearson Education, Inc.

Brudhiprabha, P. (1964). *A comparative study of difficult sounds in English for Thai speakers*. Diploma of English as a second language.

Carruthers, S. (2007). Articulatory training on facial movements using the webcam pronunciation mirror: A pilot study. *HPU TESL Working Paper Series*, 5(1), 3–17.

Celce-Murcia, M., Brinton, D., & Goodwin, J. M. (1996). *Teaching pronunciation: a reference for teachers of English to speakers of other languages*. Cambridge University Press.

Chan, A. Y., & Li, D. C. (2000). English and cantonese phonology in contrast: Explaining cantonese ESL learners English pronunciation problems. *Language, Culture and Curriculum*, 13(1), 67–85.

Chatranonth, P. (2007). *The impact of teacher feedback on students grammatical writing accuracy: A case study in Thailand*. Unpublished doctoral dissertation, The University of Manchester, Manchester, England.

Demirezen, M. (2005a). Palatalization in English: An articulation problem for Turkish teacher trainees. *Journal of Language and Linguistic Studies*, 1(1), 43–52.

Demirezen, M. (2005b). The /É/and/ow/Contrast curing a fossilized pronunciation error of Turkish teacher trainees of the English language. *Çankaya University, Journal of Arts and Sciences, 1*(3), 71–84.

Demirezen, M. (2006). The English /6/ and /E/ vowel sounds as fossilized pronunciation errors for the Turkish teachers of English and solutions to the problem. *Journal of Language and Linguistic Studies, 2*(2), 161–179.

Demirezen, M. (2007a). The /æ/ and /@/ Contrast as a case of fossilized pronunciation error for Turkish English teachers. *Journal of Language and Linguistic Studies, 3*(1), 83–97.

Demirezen, M. (2007b). A model to rehabilitate a fossilized pronunciation error of Turkish English language teachers: the English consonant phoneme /ng/ wrongly articulated as /ngk/ through nasal devoicing. *Journal of Language and Linguistic Studies, 3*(2), 289-303.

Demirezen, M. (2008). The /6/ and /Ý/phonems as fossilized pronunciation errors for turkish english language teachers and students: Undoing the fossilized pronunciation errors. *Journal of Language and Linguistic Studies, 4*(2), 73–82.

Demirezen, M. (2009). A model to rehabilitate a fossilized pronunciation error of Turkish English language teachers: the nasal devoicing of/eng/as/engk. *Procedia-Social and Behavioral Sciences, 1*(1), 2722–2727.

Demirezen, M. (2010a). The causes of the schwa phoneme as a fossilized pronunciation problem for Turks. *Procedia-Social and Behavioral Sciences, 2*(2), 1567–1571.

Demirezen, M. (2010b). The principles and applications of the audio-lingual pronunciation rehabilitation model in foreign language teacher education. *Journal of Language and Linguistic Studies, 6*(2), 127–148.

Derwing, T. M., & Rossiter, M. J. (2002). ESL learners' perceptions of their

pronunciation needs and strategies. *System, 30*(2), 155–166.

Ellis, R. (1995). *The study of second language acquisition*. Oxford : Oxford University
Press.

Florez, M. C. (1998). *Improving adult ESL learners pronunciation skills. The National
Center for ESL Literacy Education* (Tech. Rep.). Retrieved April 6, 2010, from
http://www. cal. org/caela/digests/Pronun. htm.

Fraser, H. (2000). *Coordinating improvements in pronunciation teaching for adult
learners of English as a second language*. DETYA (ANTA Innovative Project).

Gass, S. M., & Selinker, L. (2008). *Second language acquisition: an introductory course*
(3rd ed.). New York: Routledge.

Harmer, J. (2001). *The practice of English language teaching*. New York: Longman.

Hasan, A. S. (2000). Learners' perceptions of listening comprehension problems.
Language, culture and curriculum, 13(2), 137–153.

Hazan, V., Sennema, A., Iba, M., & Faulkner, A. (2005). Effect of audiovisual perceptual
training on the perception and production of consonants by Japanese learners of
English. *Speech Communication, 47*(3), 360–378.

Hismanoglu, M. (2009). The pronunciation of the inter-dental sounds of English: an
articulation problem for Turkish learners of English and solutions. *Procedia - Social
and Behavioral Sciences, 1*(1), 1697–1703.

Jesry, M. M. (2005). Theoretically-based practical recommendations for improving
EFL/ESL students pronunciation. *Language & Traslation, 18*, 1-33.

Jukpim, C. (2009). An investigation of KU CSC students pronunciation performance
reflects pronouncing needs improving. *In Englishes and Literatures-in-English in a
Globalised World: Proceedings of the 13th International Conference on English in
Southeast Asia* (pp. 378–385). Singapore.

Kelly, G. (2000*). How to teach pronunciation* (1st ed.). London: Longman/Pearson Education Limited.

Kendrick, H. (1997). Keep them talking! a project for improving students' L2 pronunciation. *System, 25*(4), 545–60.

Kenworthy, J. (1987). *Teaching English pronunciation*. Oxford: Oxford University press.

Keys, K. J. (2002). Interlanguage phonology: Theoretical questions and empirical data. *Linguagem & Ensino, 5*(1), 75–91.

Krashen, S. (1978). Second language acquisition. *A survey of linguistic science*, 317–338.

Lado, R. (1961). *Linguistics across cultures - applied linguistics for language teachers*. Ann Arbor: University of Michigan Press.

Macdonald, S. (2002). Pronunciation-views and practices of reluctant teachers. *Prospect-Adelaide, 17*(3), 3–18.

Marinova-Todd, S. H., Marshall, D. B., & Snow, C. E. (2000). Three misconceptions about age and l2 learning. *TESOL Quarterly, 34*(1), 9–34.

Ministry of Education in Thailand. (2008). *The basic education core curriculum B.E 2551*. Bangkok: Agricultural Co- operative Federation of Thailand.

Moyer, A. (2004). *Age, accent, and experience in second language acquisition: an integrated approach to critical period inquiry*. Multilingual Matters Ltd.

Nation, I. S. P., & Newton, J. (2009). *Teaching ESL/EFL listening and speaking*. New York: Routledge.

Neri, A., Cucchiarini, C., & Strik, H. (2006). Selecting segmental errors in non-native Dutch for optimal pronunciation training. *IRAL-International Review of Applied Linguistics in Language Teaching, 44*(4), 357404.

Nunan, D. (2003). *Practical English language teaching*. New York: McGraw-Hill.

Odlin, T. (1989). *Language transfer: cross-linguistic influence in language learning.*
    Cambridge University Press.

O'Grady, W., Aronoff, M., Rees-Miller, J., & Archibald, J. (1997). *Contemporary*
    linguistics. New York: St. Martin's.

Ohata, K. (2004). Phonological differences between Japanese and English: Several
    potentially problematic areas of pronunciation for Japanese ESL/EFL learners. *Asian*
    EFL Journal, 6(4), 1–18.

Phoprai, S. (2008). *A study on the effect of using language games to solve problems with*
    English word final cluster of two consonant sounds of Mathayomsuksa i students
    at Debsirin Nonthaburi school. Unpublished master's thesis, Srinakharinwirot
    University, Bangkok, Thailand.

Rasmussen, J., & Zampini, M. (2010). The Effects of Phonetics Training on the
    Intelligibility and Comprehensibility of Native Spanish Speech by Second Language
    Learners. *In Proceedings from the 1st conference of pronunciation in second*
    language learning and teaching (p. 38). Iowa, America.

Rolland, Y. (2009). Oral Interaction as a Trigger to Phonological Appropriation. *Asian*
    EFL Journal Teaching Articles, 34.

Rumelhart, D. E., & Norman, D. A. (1978). Semantic factors in cognition. In
    K. R. Cotton J.W. (Ed.), (pp. 37–53). Laurence Erlbaum: Hillsdale.

Saezhong, K. (2005). *The effects of participating in oral presentations on the English*
    speaking abilities of fourth-year English Majors. Unpublished master's thesis,
    Srinakharinwirot University, Bangkok, Thailand.

Santry, P. A. (1992). *The way South Vietnamese pronounce English.* Unpublished
    master's thesis, Victoria University, Melborne, Australia.

Selinker, L. (1992). *Rediscovering interlanguage*. UK: Longman.

Smyth, D. (1995). *Learner English: A teacher's guide to interference and other problems.* In M. Swan & B. Smith (Eds.), (p. 252-263). Cambridge university press.

Stake, R. (2003). *Strategies of qualitative inquiry*. In N. D. & Y. L. (Eds.) (Ed.), (pp. 134–164). London: Sage.

Strauss, C., & Corbin, M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques* (2nd Revised edition ed.). US: Sage Publications.

Sursattayawong, O. (2006). *A survey of English speaking problems of nurses at Rajavithi Hospital.* Unpublished master's thesis, Srinakharinwirot University, Bangkok, Thailand.

Thep-Ackrapong, T. (2005). Teaching English in Thailand: An uphill battle. *Manutsat Paritat:Journal of Hunmanities*, 27(1).

Thongsin, N. (2007). *A study of English pronunciation problems for Thai learning*.

Tiffany, W. R., & Carrell, J. (1987). *Phonetics, therory and application*. New York: McGraw-Hill.

Tsukada, K. (2006). Cross-language perception of word-final stops in Thai and English. *Bilingualism: Language and Cognition, 9*(03), 309–318.

Varasarin, P. (2007). *An action research study of pronunciation training, language learning strategies and speaking confidence*. Unpublished doctoral dissertation, Victoria University, Melbourne, Australia.

Wei, Y., & Zhou, Y. (2002). Insights into English pronunciation problems of Thai students. In *The annual meething of quadruple helix (8th, april 6,2002)*.

Wiriyachitra, A. (2002). English language teaching and learning in Thailand in this decade. *Thai TESOL Focus, 15*(1), 4–9.

Yangklang, W. (2006). *Improving english final /-l/ pronunciation of thai students through computer-assisted instruction program*. Unpublished master's thesis, Suranaree

University of Technology. Master of English Language Studies.

APPENDIX A

Pronunciation Test

English Pronunciation Test

จงอ่านออกเสียงคำต่อไปนให้ถูกต้อง

veil	thank	then	zeal	shake	pleasure
think	they	zone	she	unusual	vine
father	lazy	fashion	erosion	moving	re-thread
raising	leashing	massage	reviews	ether	lather
Irish	casual	grove	both	breath	prize
television	stove	myth	clothe	knees	crash

จงอ่านประโยคต่อไปนี้ให้ถูกต้อง

1. She has a casual job doing sports massage.
2. She shouldn't be wearing such a shabby skirt at work, should she?
3. It was very cold and wet. But we were wearing very warm clothes and we walked quickly to keep warm.
4. Ross Roth is the author of a book about moths.
5. There are three hats together in the window. Do you want the one with the feathers ?
6. He always draws the bodies so well, doesn't he? He's such an amazing artist.

จงอ่านบทความต่อไปนี้ให้ถูกต้อง

There were two boys named Arthur and Shrek. They sometimes played together in the big field of their village. Arthur's father was a rich man. He had only one child, but he lived in a big house with many servants. Shrek's father was a poor workman with a large family. Their was a small house, and they did all the work themselves. The two boys were not happy. Arthur was not happy because he had no brothers and sisters. Shrek was unhappy because he had to help his mother and do girls' work. One day the boys' fathers came together and talked about their sons. They made decision to let the boys change places. So Shrek went to live in the rich man's house, and Arthur came to stay in the poor man's house. Were the boys happy now? Of course not. It is unusual. Shrek did not like to live by himself and be his teacher's only pupil. He wanted to be back in his own home with his brothers and sisters. Arthur too was unhappy. He did not like all the work he had to do, and he did not like Shrek's brothers and sisters. In the ends the boy were glad to change places again and live in their own homes.

Good luck

APPENDIX B

The Pronunciation Check List

Name_____   Total:_____

Pronunciation Check List

Vocabulary	Right	Wrong	Vocabulary	Right	Wrong	Vocabulary	Right	Wrong
veil			then			shake		
think			zone			unusual		
father			fashion			moving		
raising			massage			ether		
Irish			grove			breath		
television			myth			knees		
thank			zeal			pleasure		
they			she			vine		
lazy			erosion			bother		
leashing			reviews			lather		
casual			both			prize		
stove			clothe			crash		
Total:			Total:			Total:		

Sentences Reading Test

1. She has a casual job doing sports massage.

   she   :   right   wrong
   casual: right   wrong
   massage: right   wrong

2. She shouldn't be wearing such a shabby skirt at work, should she?

   she   :   right   wrong
   shabby: right   wrong
   should :   right   wrong

3. It was very cold and wet. But we were wearing very warm clothes and we walked quickly to keep warm.

   very: right   wrong
   clothes: right   wrong

4. Ross Roth is the author of a book about moths.

   Roth: right   wrong
   author: right   wrong
   moths: right   wrong

5. There are three hats together in the window. Do you want the one with the feathers ?

   There: right   wrong
   together: right   wrong
   with: right   wrong
   feathers: right   wrong

6. He always draws the bodies so well, doesn't he? He's such an amazing artist.

   Draws: right   wrong
   bodies: right   wrong
   amazing: right   wrong

   Total : _____ points/ 18 points
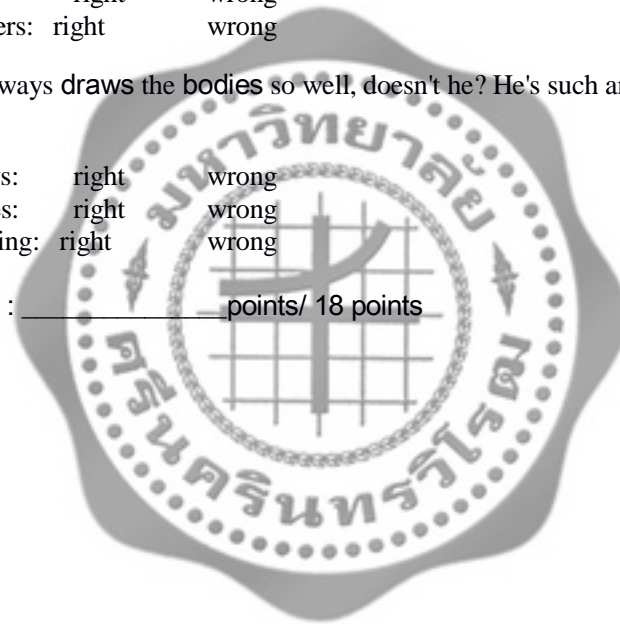
APPENDIX C

The Lesson Plan

Lesson Plan [1]

Topic : /v/ and /w/
Duration: 50 minutes
Preparation: CD player

Warm-up

1. Teacher greets all students and shows "the picture of van, village, farmer, No. 17 and vine" on the board by asking students :

T: Everybody, what is it?
Ss 1: It's a van. (He pronounce /wan/ instead of /van/)

(While students are speaking or telling the story, the teacher have to notice the mispronounce words that students make. However, the teacher does no correction of those pronunciation.)

2. After checking students' vocabulary, the teacher ask them to make a short story which including 2-3 sentences.

Reviewing

4. The teacher asks students to notice their pronouncing by asking whether they have problem in pronunciation those vocabulary presented and eliciting them to indicate the sounds. If none of student has problem or can indicate the problematic sounds they have, the teacher will introduce to the today's topic.

Introducing today's topic

5. The teacher introduces to the today topic by saying:

T: Dear students, English sound is difference from Thai sound. Can you give me some example of Thai consonant which have similar sound?
Ss: …....................................(ส,ศ,ษ ออกเสียงเปน ส)
T: Right, while we have "ซ,ฬ" that pronounce as 'ส' completely but in English for example "v" is pronounced quite differences from "w". We say the word 'v' as /vi:/ but for the word 'we' we say /w:/. Therefore, when Thai students learn to pronounce English sound they usually substitute the Thai pronunciation characteristic to English as I heard from someone say " It is a van". He pronounced /wan/ which mean nothing in English instead of /van/ which mean รถ. Moreover, you are English Teacher students who will be the good model for your students in the future. So, I think, it is necessary to let you all correct your pronunciation.

6. The teacher give students the corpus and ask them to listen and repeat. (teacher plays the the audio 1.1 from CD player)

Preparing and presenting a corpus Presenting a corpus

7. Then, teacher gives students a list of words (Handout 1.1) and asks students to listen and repeat all words in a list after her.
8. After that, teacher asks student students to match the words which have similar pronunciation.

Creating tongue twister

9. The teacher asks students to look at the tongue twisters (Handout 1.2). Then, she asks student to repeat after her in the first tongue twister. But the next one, the teacher might

read the first line and then asks a volunteer to read. Then, the teacher would encourage the class to repeat after him/her.

Doing recognition exercises

10. The teacher asks students to listen to the pronunciation of the words and write down '1' if they think the word that they hear contains /v/. And if they think the word they hear contains /w/ , they have to write down '2'. (Handout 1.3)

Giving the rules

11. The teacher shows a clip of the tongue position when pronouncing /v/ and /w/. Then she explains the different positioning of the two sounds.

Producing further drills
Practicing with minimal sentences

12. The teacher runs the pronunciation peer correction activity. (Handout 1.4)
13. The teacher asks students to work in pair. Student A will have a Handout1.4 A and student B will have a Handout 1.4 B.
14. Students A has to read the sentence as it is written, including the wrong pronunciation (avoid saying the correct pronunciation, which is in brackets after the sentence). Student B must spot which word student A is mispronouncing and correct his pronunciation or elicit the correct pronunciation from student A. If student B can say the mispronounce word correctly, he will get one point. But if student B cannot catch the word, the student A will have one point.
15. Then, it is the turn of student B to read the sentence.

Practicing with Problem sound focused exercises

10. The teacher breaks students into group of three and give them Handout 1.5 .
11. Each group has to listen to the song 'Wait for you' and complete the lyric.
12. Teacher plays the song two times, then give the correct answer. Which group has the highest scores will be winner.

Making a summary

13. The teacher summarizes the lesson. Then , she asks if any students have a question.

Giving assignment

14. The teacher gives students homework (Handout 1.6)

Vocabulary list of [v] and [w]

Read aloud vocabulary below and then match the minimal pair pronunciation.

wail	vary
Walt	vice
wane	vile
wary	move
weird	vault
we'll	vest
wend	vend
went	roving
west	veil
wet	visor
wile	veal
wine	vine
wiper	moving
wise	vain
worse	stove
rowed	veered
mooing	vent
rowing	roved
moo	viper
wiser	vie
grew	verse
row	vet
grow	groove
stow	rove
Y	grove

Write down the minimal pairs in the space provided.

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

10._____

11._____

12._____

13._____

14._____

15.._____

16._____

17._____

18._____

19.._____

20._____

21._____

22._____

23.._____

24._____

25._____

Tongue twisters

1. The vent
   The water vent
   The mouse went into the water vent.

2. The wine
   The vine wine.
   I stow a bottle of vine wine into the store.
   I stow a bottle of vine wine into the store behind the stove.

3. The dove
   The wise dove
   The wise dove steals a dough.
   The wise dove steals a dough from the vice.

4. The vest
   The wet vest
   The vet puts on the wet vest.
   The vet puts on the wet vest and goes to the west.

5. The veal
   We'll eat the veal.
   We'll eat the veal with wine.
   We'll eat the veal with wine under the vine tree.
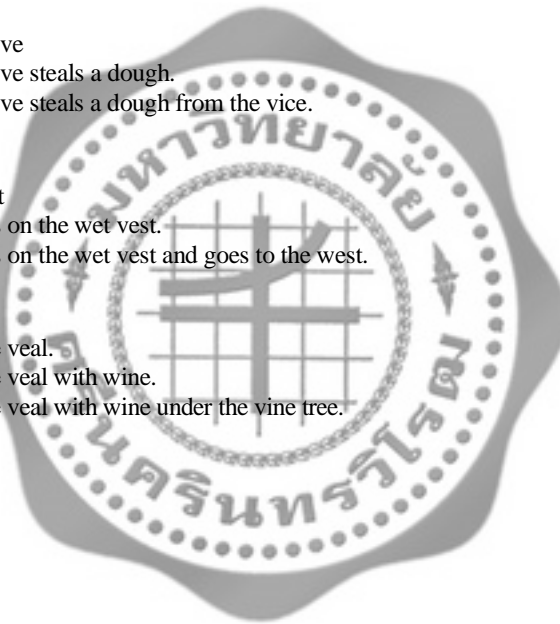
Handouts for teacher

Word recognition
Teacher reads the words below two times and then asks students to write down '1' if they think the word that they hear contains /v/ and write down '2' if they think the word they hear contains /w/.

A: minimal pair words

1. wheel [2]   2. vet [1]   3.V [1]

6. verse [1]   7. veils [1]   8. worse [2]

B: sentences

1. This is my best vine.
2. V didn't come before U.
3. The dog's wet.
4. It is a blue whale.
5. That's the vest.
6. That's a good wine.
7. Did you look in the west?
8. I didn't expect to see the wiper.
9. They roved through the park.
10. The cow was moving.

C: Sentences

1. It would be wiser to clean the visor.
2. Did Walt put it in the vault?
3. My verse is getting worse.
4. They road down the roved.
5. Violets grow in that grove.
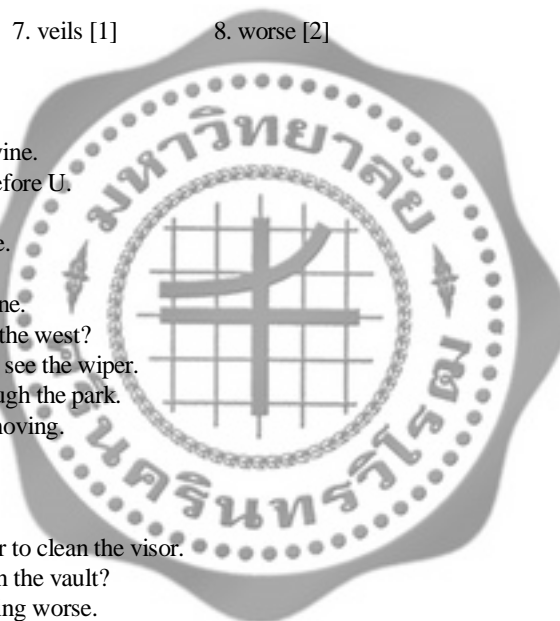
A:Listen to the word and write down '1' if you think the word that you hear contains /v/ and write down '2' if you think the word you hear is /w/.

1._____2._____3._____4._____5._____

6._____7._____8._____9._____10._____

B:Pay attention to the words in bold. Circle the word that the teacher pronounces.

1. This is my best vine/wine.

2. V/We didn't come before U.

3. The dog's vet/wet.

4. It is a blue veil/whale.

5. That's the west/vest.

6. That's a good wine/vine.

7. Did you look in the west/vest?

8. I didn't expect to see the wiper/viper.

9. They rowed/roved through the park.

10. The cow was mooing/moving.

C:Listen to the word carefully and underline the correct word.

1. It would be wiser/visor to clean the wiser/visor.

2. Did Walt/vault put it in the Walt/vault?

3. My worse/verse is getting worse/verse.

4. They road/roved down the road/roved.

5. Violets grow/grove in that grow/grove.

Pronunciation peer correction

Student A

Read out the sentence as it is written, including the wrong pronunciation (avoid saying the correct pronunciation, which is in brackets after the sentence). Your partner must spot which word you are mispronouncing and correct your pronunciation or elicit the correct pronunciation from you. If your partner can't work out which sound he/she should be correcting, tell him/her so that he/she can practice correcting.

Useful language

"Can you repeat the _____ word?"

"Do you mean (_____ or _____)?" "You

need to put your mouth is this position"

"Try making the sound longer/ shorter"

"Good, now try saying the whole sentence with the correct pronunciation"

1. Jone won the <u>wote</u> (vote).

2. We need more <u>wolts</u> (volts).

3. What a lovely <u>wiew</u> (view) you have!

4. Have you <u>ewer</u> (ever) been to <u>Wenice</u> (Venice)?

5. Sorry, I didn't go <u>vith</u> (with) you last night. My <u>wan</u> (van) was broken.

Pronunciation peer correction

Student B

Read out the sentence as it is written, including the wrong pronunciation (avoid saying the correct pronunciation, which is in brackets after the sentence). Your partner must spot which word you are mispronouncing and correct your pronunciation or elicit the correct pronunciation from you. If your partner can't work out which sound he/she should be correcting, tell him/her so that he/she can practice correcting.

Useful language

"Can you repeat the _____ word?"

"Do you mean (_____ or _____)?" "You

need to put your mouth is this position"

"Try making the sound longer/ shorter"

"Good, now try saying the whole sentence with the correct pronunciation"

1. They're good wets (vets).

2. He ate it with weal (veal).

3. We need more wolt (volt).

4. He vore (wore) his west (vest).

5. The vay (way) he was reared is wary (very) weird.

Teacher's handout
Choose the given words to fill in the blanks.

over, leave,what, with,world, wishing, would, never, have, wait, why, love, way, give, want

Wait for you : Elliott Yamin

I never felt nothing in the world like this before
Now I'm missing you and I'm wishing
You would come back through my door, ooh Why
did you have to go? You could've let me know
So now I'm all alone

Girl, you could have stayed but you wouldn't give me a chance
With you not around it's a little bit more than I can stand, ooh
And all my tears they keep running down my face
Why did you turn away?

So why does your pride make you run and hide
Are you that afraid of me?
But I know it's a lie what you keep inside
This is not how you want it to be

* So baby, I will wait for you
'Cause I don't know what else I can do
Don't tell me I ran out of time
If it takes the rest of my life
Baby, I will wait for you
If you think I'm fine it just ain't true
I really need you in my life
No matter what I have to do, I'll wait for you

Been a long time since you called me (How could you forget about me?)
You gotta be feeling crazy
How can you walk away, everything stays the same
I just can't do it baby

What will it take to make you come back?
Girl, I told you what it is and it just ain't like that
No, why can't you look at me? You're still in love with me
Don't leave me crying

Baby, why can't we just, just start over again?
Get it back to the way it was
If you give me a chance I can love you right
But you're telling me it won't be enough
(*)

Choose the given words to fill in the blanks.

over, leave, what, with, world, wishing, would, never, why, love, way, have x 2, wait x2

Wait for you : Elliott Yamin

I _____ felt nothing in the _____ like this before
Now I'm missing you and I'm _____
You would come back through my door, ooh
Why did you have to go? You could've let me know
So now I'm all alone

Girl, you could _____ stayed but you wouldn't _____ me a chance
_____ you not around it's a little bit more than I can stand, ooh
And all my tears they keep running down my face
Why did you turn away?

So _____ does your pride make you run and hide
Are you that afraid of me?
But I know it's a lie _____ you keep inside
This is not how you _____ it to be

* So baby, I will _____ for you
'Cause I don't know what else I can do
Don't tell me I ran out of time
If it takes the rest of my life

Baby, I will _____ for you
If you think I'm fine it just ain't true
I really need you in my life
No matter what I _____ to do, I'll wait for you

Been a long time since you called me
(How could you forget about me?)
You gotta be feeling crazy
How can you walk away, everything stays the same
I just can't do it baby

What will it take to make you come back?
Girl, I told you what it is and it just ain't like that
No, why can't you look at me? You?re still in _____ with me
Don't _____ me crying

Baby, why can't we just, just start _____ again?
Get it back to the _____ it was
If you _____ me a chance I can love you right
But you're telling me it won't be enough
(*)

Name_____

/v/ and /w/

A: Draw a place of articulation of when pronounce /◦/ and /d/. Look up the dictionary and find out 3 minimal pair sounds and then make sentences.

/v/

/w/

The minimal pair sounds

Example: view-wheel

1.

2.

3.

Name_____

B: Match the words that you think are minimal pairs.

1._____vain   a. weird
2._____ vend   b. wane
3._____ veer   c. dove
4._____dough   d. we're
5._____grow   e. wend
6._____ veered   f. groove

C: Practice pronouncing these sentences, indicate whether the words in bold contain /ʋ/ or /d/ by marking phonetic symbol above the word.

For example :   /v/   /w/
                  My **verse** is getting **worse**.

1. **Where** did you go with **Victor**?

2. **What** did **William** and **Virginia** do on **Wednesday**?

3. Violets **grow** in that **grove**.

4. The cow was **mooing** while **moving** out the stall.

5. The **vice** president is a **wise** man.

6. My parents usually **stow** knives in the knife block next to the **stove**.

APPENDIX D

The Questionnaires (Thai version)

แบบสอบถามความคิดเห็น

การอบรมการออกเสียงภาษาอังกฤษ

แบบสอบถามนี้เป็นส่วนหนึ่งของการวิจัยสำรวจและประเมินผลการใช้วิธีการสอนออกเสียงภาษาอังกฤษแบบ **Audioarticulation Model** โดยมุ่งหวังที่จะนำข้อมูลที่ได้รับจากการสำรวจมาเป็นประโยชน์ต่อการส่งเสริม สนับสนุนและพัฒนาวิธีการสอนในห้องเรียนในโอกาสต่อไป จึงขอความกรุณาให้ตอบแบบสอบถามทุกข้อตามข้อ เท็จจริง

คำชี้แจง : กรุณาใส่เครื่องหมาย / หน้าขอความที่ตรงกับข้อเท็จจริงหรือความคิดเห็นของท่านมากที่สุด

เกณฑ์การตอบ : แบบสอบถามบางส่วนเป็นแบบประเมินค่า 5 ระดับ โดยมีเกณฑ์การประเมิน ดังนี้

1 หมายถึง น้อยที่สุด (ระดับคะแนน 1- 20%)

2 หมายถึง น้อย (ระดับคะแนน 21- 40 %)

3 หมายถึง ปานกลาง (ระดับคะแนน 41 - 60 %)

4 หมายถึง มาก (ระดับคะแนน 61 - 80 %)

5 หมายถึง มากที่สุด (ระดับคะแนน 81 - 100 %)

หมายเหตุ : ข้อมูลทงหมดจะถูกเก็บไว้เป็นความลับและใช้เพื่อการวิจัยเท่านั้น

ส่วนที่ 1 : ข้อมูลส่วนตัว

1. เพศ … .... ชาย …............. หญิง
2. อายุ … ....
3. คุณเริ่มเรียนภาษาอังกฤษครั้งแรกขณะเรียนอยู่ระดับชั้นใด

… ....

4. คุณเคยเรียนวิธีการออกเสียงภาษาอังกฤษหรือไม่ หากเคยเริ่มเรียนตั้งแต่ระดับชั้นใด

… ....

5. คุณเคยเดินทางไปต่างประเทศที่ใช้ภาษาอังกฤษเป็นภาษาหลักหรือไม่ ถ้าใช่ เป็นระยะเวลานานเท่าใด

… ....

ส่วนที่ 2 : ความคิดเห็นต่อการออกเสียงภาษาอังกฤษ

		เห็นด้วยเป็นอย่างยิ่ง	เห็นด้วย	เฉยๆ	ไม่เห็นด้วย	ไม่เห็นด้วยเป็นอย่างยิ่ง
		5	4	3	2	1
1	การออกเสียงภาษาอังกฤษที่ถูกต้องเป็นสิ่งสำคัญสำหรับฉัน					
2	ฉันอยากออกเสียงภาษาอังกฤษคล้ายเจ้าของภาษาให้มากที่สุดเท่าที่ฉันจะทำได้					
3	ฉันพยายามเลียนแบบการออกเสียงของเจ้าของภาษาให้มากที่สดเท่าที่ฉันจะสามารถทำได้					
4	การที่จะสามารถออกเสียงภาษาอังกฤษได้ถูกต้องเราจำเป็นต้องฝึกฝนอย่างมาก					
5	ฉันคิดว่าในการเรียนภาษาองกฤษ ครูควรให้ความสำคัญกับการออกเสียงในห้องเรียนให้มากขึ้น					

ส่วนที่ 3 : ความคิดเห็นต่อการสอนภาษาอังกฤษตามวิธีการ Audioarticulation Model (AAM)

		เห็นด้วยเป็นอย่างยิ่ง	เห็นด้วย	เฉย ๆ	ไม่เห็นด้วย	ไม่เห็นด้วยเป็นอย่างยิ่ง
		5	4	3	2	1
1	การสอนด้วยการให้พูดซ้ำ ๆ (drill) ช่วยให้ฉันสามารถออกเสียงได้ถูกต้องมากขึ้น					
2	การสอนแบบเปรียบเทียบเสียงคู่ (minimal pair) ช่วยให้ฉันสามารถแยกเสียงและออกเสียงได้ถูกต้องมากขึ้น					
3	การสอนอ่านประโยคแบบ tongue twister ช่วยให้ฉันระมัดระวังในการออกเสียงและออกเสียงได้ถูกต้องมากขึ้น					
4	ระยะเวลา 50 นาทีต่อคาบสำหรับการฝึกการออกเสียงเหมาะสมและเพียงพอต่อการฝึกออกเสียง 1 คู่ เสียง (minimal pair)					

		เห็นด้วยเป็นอย่างยิ่ง	เห็นด้วย	เฉย ๆ	ไม่เห็นด้วย	ไม่เห็นด้วยเป็นอย่างยิ่ง
		5	4	3	2	1
5	คำอธิบายเกี่ยวกับอวัยวะภายในปากและตำแหน่งเพื่อใช้ออกเสียงแต่ละเสียง ช่วยให้ฉันเข้าใจวิธีการออกเสียงและทำให้ฉันสามารถปรับปรุงวิธีการออกเสียงให้ถูกต้อง					
6	หลังจากเข้าเรียนในคอร์สนี้ ฉันมีความเข้าใจหลักการออกเสียงมากขึ้นกว่าเดิมมาก					
7	ฉันรู้สึกมั่นใจในการออกเสียงของฉันมากขึ้นหลังจากเรียนคอร์สนี้จบ					
8	ฉันสามารถเปลี่ยนการออกเสียงที่ไม่ถูกต้องของฉันได้เมื่อฉันเรียนจบคอร์สนี้					
9	ฉันรู้สึกชอบการสอนการออกเสียงด้วยวิธีนี้					
10	ฉันอยากให้นำวิธีการสอนเช่นนี้เข้ามาสอนในห้องเรียนในอนาคต					

ส่วนที่ 4 : ข้อคิดเห็นและข้อเสนอแนะ

1. ตลอดระยะเวลาที่เรียนในคอร์สนี้ คุณมีความคิดเห็นและความรู้สึกอย่างไรบ้างต่อวิธีการสอนแบบ Audio articulation Model

_____
_____
_____
_____
_____

2. จากกิจกรรมทั้งหมดในคอร์สนี้ คุณชอบกิจกรรมช่วงใดมากที่สุด และชอบกิจกรรมช่วงใดน้อยที่สุด เพราะเหตุใด

_____
_____
_____
_____
_____

3. ข้อเสนอแนะอื่น ๆ เพื่อการปรับปรุงการสอนในโอกาสต่อไป

_____
_____
_____
_____
_____

ขอขอบคุณนักศึกษาทุกท่านที่ให้ความร่วมมือเป็นอย่างดีตลอดการวิจัย

APPENDIX E

The Questionnaires (English version)

Questionnaire

This questionnaire aims at investigate the trainee's opinion toward the English pronunciation training course based on Audioarticulation model and gains the information for further training development.

Instruction : Please fill in the blank state your opinion toward the training course below
Rating scale

1 means Most disagree (level of agreement 1- 20%)

2 means Disagree (level of agreement 21- 40 %)

3 means Neutral (level of agreement 41 - 60 %)

3 means Agree (level of agreement 61 - 80 %)

5 means Most agree (level of agreement 81 - 100 %)

Ps : The data collected in this questionnaire will be carefully protected and will be used for research purposes only.

Part 1 : Personal Profile

1. status …........male…..........female

2. age …..

3. When do you start learning English?
…..

4. Have you ever learned pronunciation course? If so when you did you learn?
…..

5. Have you ever been to the country that use English as first language? If so how long have you been there?
…..

Part 2 : The learner's opinion toward English pronunciation

		Most agree	agree	neutral	disagree	Most disagree
		5	4	3	2	1
1	The correct pronunciation is important to me.					
2	I would like to achieve a native-like pronunciation.					
3	I practice to pronounce like native speaker.					
4	To achieve the correct English pronunciation, the very hard practicing is important.					
5	I think, English teacher should give more attention to pronunciation in classroom.					

Part 3 : The learner's opinion toward the Audioarticulation model

		Most agree	agree	neutral	disagree	Most disagree
		5	4	3	2	1
1	The drill activity can improve my correct pronunciation.					
2	The minimal pair activity can help me to discriminate the sound more correctly.					
3	The tongue twister activity improves my awareness of English pronunciation.					
4	50 minutes per class is appropriate in each class is appropriate for practicing the problem sounds.					
5	The teacher's explanation about how to use the place of articulation to pronounce a sound help me to understand and pronounce the sound correctively.					
6	After attending the course, I have much understanding about how to pronounce the English sounds.					
7	After attending the course, I feel more confident when speaking English.					
8	At the end of the course, I can change my erroneous English pronunciation.					
9	I like the Audioarticulation model.					
10	If I am English teacher, I would like to apply the Audioarticulation model into my classroom.					

Part 4 : Additional opinion and suggestion

1. During the course, what are your opinions toward the Audioarticulation model.

_____
_____
_____
_____
_____
_____

2. Which activity do you like most and which one don't you like most?

_____
_____
_____
_____
_____

3. Any comment and suggestion.

_____
_____
_____
_____
_____

Thank you for attention and co-operation.
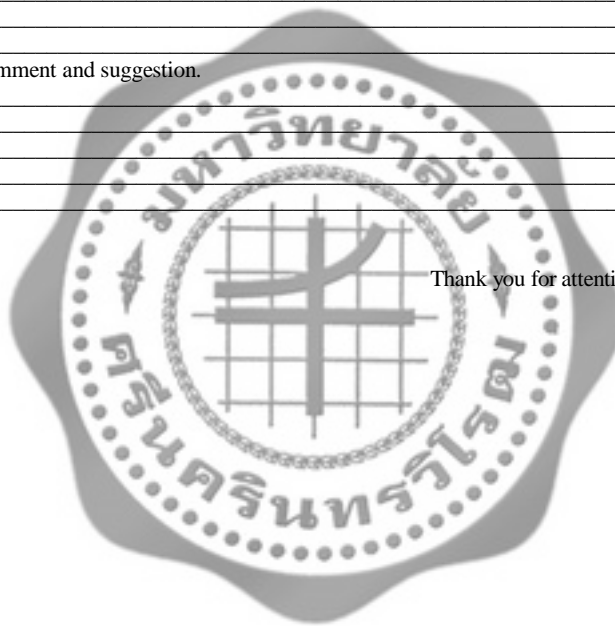
APPENDIX F

The Learning logs

LEARNING LOG

Name...Date..

- What did I do?

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

- How do I think/feel about this?

_____
_____
_____
_____
_____
_____
_____

What did I think about but not say (or what did I want to say but did not)

_____
_____
_____
_____
_____
_____
_____

- How well (or badly) did it go?

_____
_____
_____
_____
_____
_____
_____
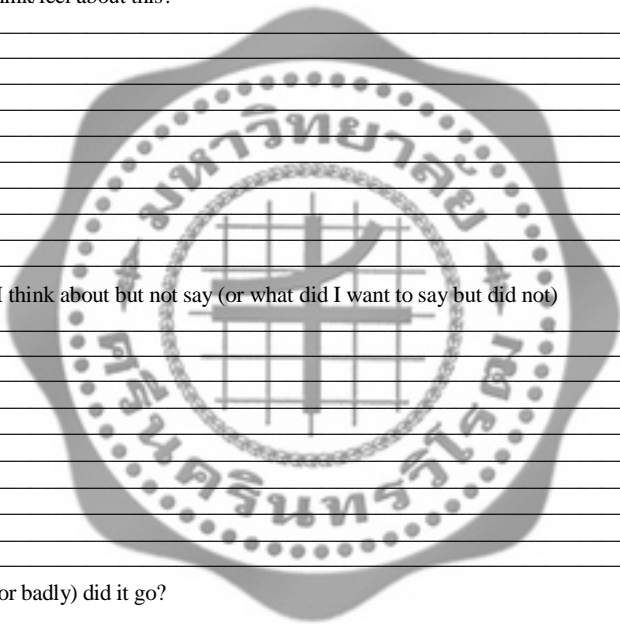
- What did I learn?

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

- What have I achieved?

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

- How does what I have been doing lead to me becoming better at a skill

_____
_____
_____
_____
_____
_____
_____
_____

- How can I use this to plan for the future?

_____
_____
_____
_____
_____
_____
_____
_____
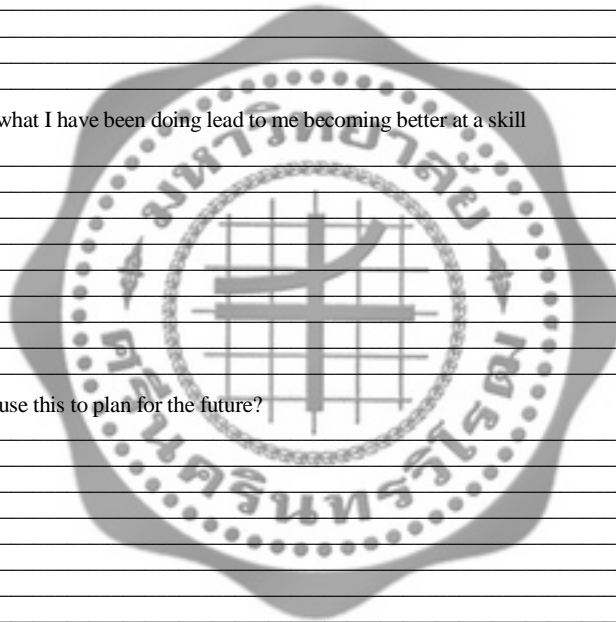
APPENDIX E

The Table of Critical Values for the Wilcoxon/Mann-Whiney Test

Critical Values of the Mann-Whitney U
(Two-Tailed Testing)

For two-tailed. 5% significance level**.**

N_2	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
N_1																
2				0	0	0	0	1	1	1	1	1	2	2	2	2
3	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
4	0	1	2	3	4	4	5	6	7	9	10	11	11	12	13	14
5	2	3	5	6	7	8	9	11	12	13	14	15	17	18	19	20
6	.	5	6	8	10	11	13	14	16	17	19	21	22	24	25	27
7	.	.	8	10	12	14	16	18	20	22	24	26	28	30	32	34
8	.	.	.	13	15	17	19	22	24	26	29	31	34	36	38	41
9	.	.	.	.	17	20	23	26	28	31	34	37	39	42	45	48
10	.	.	.	.	.	23	26	29	33	36	39	42	45	48	52	55
11	.	.	.	.	.	.	30	33	37	40	44	47	51	55	58	62
12	.	.	.	.	.	.	.	37	41	45	49	53	57	61	65	69
13	.	.	.	.	.	.	.	.	45	50	54	59	63	67	72	76
14	.	.	.	.	.	.	.	.	.	55	59	64	69	74	78	83
15	.	.	.	.	.	.	.	.	.	.	64	70	75	80	85	90
16	.	.	.	.	.	.	.	.	.	.	.	75	81	86	92	98
17	.	.	.	.	.	.	.	.	.	.	.	.	87	93	99	105
18	.	.	.	.	.	.	.	.	.	.	.	.	.	99	106	112
19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	113	119
20	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	127

VITAE

Name: Miss Ampawan Imamesup

Date of Birth: April 18, 1985

Place of Birth: Chiangmai, Thailand

Address: 79 Moo. 12 Langpanit Road

Maesariang, Maehongson 58110

Educational Background:

2003   Senior High School Diploma (Science-Mathematics)

Boripat Suksa School

2007   Bachelor of Education Degree (2st Class Honours)

Chiangmai Rajabhat University

2011   Master of Arts Degree in Teaching English as a Foreign

Language

Srinakharinwirot University