Input and the acquisition of suprasegmental phonology in English by Thai school children

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Input and the Acquisition of Suprasegmental Phonology in English by Thai School Children

by

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Abstract

This thesis discusses an experimental study whose aim was to find out whether English pronunciation teaching can be improved in Thai schools, where English has recently been introduced at the primary level. The main study was first underpinned by a baseline study conducted to confirm the low level of achievement in English phonology in Thailand. Data were collected from a relatively small cross-section of Thai English learners (34 in total) from three levels: beginning (primary school), intermediate (secondary school), and advanced (university, both English majors and non-English majors). The results from the baseline study helped guide the direction of the experimental study. Results revealed that all across-levels, Thai learners share similar problems in English pronunciation including 1) mispronouncing the clusters in English either in initial or final position; 2) not pronouncing the final sound of English words; and 3) misstressing disyllabic and multi-syllabic English words. These non-target pronunciations lead to undesirable unintelligibity (Kenworthy, 1978). The thesis next considers the reasons for such problems and the conclusion is that this is due to the variety of English Thai learners are exposed to, that is from Thai teachers whose accents deviate from native English speakers (see Young-Scholten, 1995).

How pronunciation is dealt with in Thailand inspired the main study. The experiment exposed two groups of learners to two types of English language lessons presented on tape, with voices of English native speakers the same age as the Thai learners. One type of lesson involved only primary linguistic input, similar to how a language is naturally learned (through interaction with English native speakers) and the other added awareness raising to this. Both lessons minimized the use of Thai. The content of the lessons was based on English syllable structure and primary stress and included 60 English words from the Thai national curriculum. These lessons were implemented with two different groups of 23 and 27 Thai first year primary school learners not yet exposed to English. The idea of investigating young learners was based on the grounds that the introduction of English to Thai learners has recently shifted to primary school. As a control group, a class of 30 learners who were the same age and at the same class level was selected to represent those who were learning English in Thai school fashion.

Each experimental group had a 20-25 minute lesson every day for four weeks with the experimenter after a pre-test was administered. A control group who were learning English from Thai teachers received five to ten minutes of additional general tuition a day. Production test results from an immediate post-test and a one-month delayed post-test indicated the experimental groups performed significantly better on English syllable structure and stress than the control group. The errors produced showed the experimental group learners were similar in development to how first language learners of English acquire their native language and also closer to approximating the target language when compared with the control group.

The study showed that both types of lessons using recorded native speakers input for the development of English phonology seemed to work equally well with young Thai learners. This indicates that pronunciation teaching for Thai learners can straightforwardly be improved. The large-scale development of lessons is recommended where the primary source of language input is from recordings from native speakers similar to those implemented with the two experimental groups.

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Chapter 1

Introduction

1.1 Background of the study

Learners of English in Thailand, like many other second language learners around the world, seem to find it difficult to acquire English pronunciation to the level of 'comfortable intelligibility'. It is especially in aspects of syllable structure and stress where mispronunciations seem most likely to lead to unintelligibility in English language communication (Kenworthy, 1987; McNerney and Mendelsohn, 1992; Pennington and Richards, 1986; Prator, 1971). The evidence of second language learners' problems is not only confirmed in general by studies done in the past few decades (e.g. Archibald, 1993; Oller, 1975; Tarone, 1978) but also by the results of a cross-sectional baseline study of how Thai learners of English deal with English pronunciation. The problems with pronunciation among Thai learners of English have probably long existed, and we can assume that they will not disappear, if pronunciation teaching is neglected because the various methods of English language teaching used in Thailand, from the traditional grammar translation to the current communicative approach to foreign language teaching seem to neglect the teaching of pronunciation. As a teacher of English in Thailand, I began this study because I could not just ignore the problems. Pronunciation teaching needed attention so that the communication in English between Thais and the rest of the world might not suffer communication break down through the mispronunciation of Thai learners of English. And what I concluded should be done formed the shape of this research study.

1.2 Aims of the thesis

The main aim of this study was to explore possible teaching materials to help improve English pronunciation to Thai learners of English. As mentioned above, I started out the research with a baseline study. The aim of this study was to obtain information about current Thai pronunciation problems in English to guide the direction of the main, experimental study. In the baseline study, data in relation to pronunciation were collected across three levels of learners of English in Thailand from post-beginning to advanced learners; university students majoring in English were included. After data from the baseline study were analysed, it was revealed that Thai learners of English across these levels, including those university students majoring in English, continued to have problems in the pronunciation of English. These included problems like deletion of final consonants in English words, simplification of clusters in either initial or final position in English words and problems with the application of stress assignment, with the mistressing of English words. The word 'apple', for example, is commonly pronounced with each syllable receiving equal stress as ['æp'pɜn]. The baseline study data shows these errors do not disappear with more classroom English. All learners from the baseline study tend to share the similar problems with English syllable structure and stress pattern. These Thai learners tended to mispronounce clusters in all positions; they also tended to delete all the final single consonants in English words. In terms of English stress pattern, they put the stress on the wrong syllable of multi-syllabic English words. The more syllables in a word, the more problems these learners demonstrated.

The purpose of my experimental study was then to explore materials that would help improve pronunciation in English in these areas. The experimental research was done

not on post-puberty learners, but on young learners for two reasons. (1) Because the Thai Ministry of Education has since 1996 required the introduction of English to primary school children as young as six to seven years old. (2) If young learners could be prevented during the critical period from fossilising like the learners in the baseline study, the problems of Thai unintelligibility might disappear.

The next chapter of this thesis, Chapter 2, discusses previous research on the second language (L2) acquisition of syllable structure and stress. Because errors are produced by second language learners, this does not mean that learners will be unsuccessful in language acquisition. Errors, in fact, may represent learners' developmental processes and show movement in the direction of target language. Our discussion in this chapter covers ideas on interlanguage in phonology. I next discuss the Critical Period Hypothesis and studies that have shown that younger L2 learners can do better than their older counterparts in the L2 acquisition of phonology. Young learners of English in Thailand are the target group of the main study, and the materials developed for the main study were aimed at teaching young L2 learners of English in Thailand.

In the later part of the chapter, the discussion will include more specific research, on Thai learners of English and their problems with English syllable structure and stress. The research discussed here implies that through long years of English language learning, adult (post-puberty) Thai learners of English still have problems. The reason for what seems to be fossilisation is my concern, and I suggest that it is because of the input when Thai learners are exposed to through their pronunciation

practice. This is not input that helps Thai learners to acquire English phonology, but it is Thai-accented English.

To give and insight into the differences between the two languages, the discussion of the characteristics of Thai with respect to syllable structure and tone and a description of English stress and syllable structure follows.

In Chapter Three, the baseline study of learners at four different levels is discussed. The results confirm that Thai learners at all these levels continue to transfer their native language stress and syllable structure to English. It is proposed that this is due to current methods of teaching pronunciation.

As English is now being introduced at primary school level in Thailand, Chapter 4 starts out with the Thai curriculum for teaching English in Thailand. The discussion includes primary school and secondary school English teaching. How English pronunciation is treated in English classes is a specific focus of the discussion in this chapter. I suggest that this provides an insight into the reason why Thai learners of English still have problems with pronunciation after years of instruction in English. The question is then posed regarding what should be done about English pronunciation teaching in Thailand. A preliminary response to the question is provided through a discussion of how pronunciation is recommended to be taught by experts in English language teaching. But the question posed is whether these recommendations are suitable in the Thai context.

The issue of input is important in this thesis. In second language learning, one cannot deny that language input plays an important role in the process of the acquisition of phonology. What might be the cause of pronunciation teaching failure in Thailand is learners receiving input from Thai teachers whose English pronunciation is still affected by their native tongue. This results in learners' pronunciation that also deviates from the target language. Not many studies in second language acquisition have been conducted to test the use of native language input (Young-Scholten, 1995).

Let us briefly consider the notion of 'intelligibility' here. 'Comfortable intelligibility' (Kenworthy1987) relates to being understood without any difficulties, and it is a concept that accompanies the idea of communicative language teaching. The current view of teaching pronunciation focuses not on becoming a native speaker but on becoming intelligible. It has been suggested by many applied linguists such as Kenworthy (1987), Morley (1994), Celce-Murcia, Brinton and Goodwin(1996), and Pennington (1996) that the degree to which pronunciation teaching and pronunciation practice should be included in the classroom is to the level of learners' intelligibility. A perfect accent as produced by native speakers is considered to be far more than necessary unless learners are trained to pursue quite a limited number of careers where perfect native pronunciation is required, such as a job of an air controller in an airport, for example (Kenworthy, 1987). When the choice of language features for pronunciation practice in the classroom needs be made for syllabus design, the criteria need to be clear, especially in a foreign language context. Some justification is offered in McNerney and Mendelsohn (1992), Pennington and Richards (1986:235) ".....the current studies show that the suprasegmental and prosodic

aspects of language contribute more to intelligibility than do segmental aspects and it has been suggested that an emphasis on suprasegmentals and prosody must precede and/or be integrated with any initial treatment of segmental contrasts". My criterion of intelligibility can also be based on the top of Prator's (1971) hierarchy, which is intended to provide plans for selecting and sequencing pronunciation items to include: 1) suprasegmental intonation and stress, 2) segmental phonemes (distinctive vowel and consonant sounds), 3) relationship between spelling and sounds, 4) allophones in complementary distribution, and 5) allophones in free alternation (i.e., idiosyncratic or dialectal variations).

If the problems resulting from English pronunciation teaching practice in Thailand are left untreated, the Thai student who has just left secondary school will likely not be comfortably understood when s/he says s/he wants an [ɔ'len]- 'orange'. This example obtained from a baseline study learner aged 15 with 5 years of exposure to English in classes in Thailand, shows that even with years of instruction, learners continue to be unintelligible.

The thesis up to this point argues that there is a need for a different approach to deal with pronunciation teaching in Thailand. Chapter 5 is the presentation of the experimental study. This chapter looks at how young Thai L2 learners of English acquire English phonology in terms of syllable structure and primary stress in English through materials I developed. Discussion of strategies these learners employed to produce their interlanguage is also included. Here I conclude that one can come up with an approach that (1) seems to work and (2) that is simple enough for primary school teachers to adopt.

To end the thesis, Chapter 6 will discuss the implications of the experimental study and future directions for developing a curriculum for pronunciation teaching beyond the primary level.

Chapter 2

The L2 acquisition of English syllable structure and stress

Because my ultimate aim is the development of materials to help improve Thai L2 learners of English acquisition of syllable structure and stress, the discussion will thus be mainly on the research on the L2 acquisition of stress and syllable structure. We will start with an overview of the L2 acquisition of phonology. Next, we will have a look at the age factor in L2 acquisition as well as language input. Then background on Thai phonology will be provided, and then we will turn to the acquisition of English by Thai learners. Here is where we will look at various studies that have been conducted in relation to L2 English acquisition by Thai learners. This will allow me to address my research question: Can pre-puberty second language learners, in this case Thai primary school learners of English, acquire syllable structure and stress in English through Primary Linguistic Data input from English native speakers. The literature review in this chapter discusses studies that were conducted up to several decades ago. Therefore in Chapter 3, we turn to a baseline study which was carried out before the experimental study to determine in what areas of phonology Thai learners of English of all ages still have problems.

2.1 The second language acquisition of phonology

Learners of English as a second language not only seem to find it difficult to acquire grammatical morphemes of the new language (see White 2003), but many studies in the past few decades have shown that learners also have problems acquiring a new stress system and they have problems acquiring a new syllable structure as well. In this part of the chapter, the discussion will be of the major studies carried out in

relation to the L2 acquisition of syllable structure and stress in the past three decades. These studies were done in various situations with L2 learners from various L1 backgrounds.

Over three decades ago, Corder (1973) proposed that the rules an L2 learner develops are not just that of the learner's own L1, but are formed with a highly simplified version of it. The way hypotheses are formed, according to Corder, are also similar to how the L1 was learned at the early stages. Therefore, the errors a learner makes are not to be seen as signs of failure (as in Lado 1957), but should be treated as evidence of the learner's developing system.

Introducing the term 'interlanguage' (IL), Selinker (1972) also draws attention to the idea that the learner's second language system may be neither that of his/her mother tongue nor that of the target language (TL), but contains elements of both. Interlanguge is the systematic knowledge of an L2 which is independent of both learner's L1 and target language. This is the way in which the learner builds up his/her own rules – and produces the language which is neither the target language L2 nor the mother tongue. It is claimed that interlanguage is a system arrived at by the learner through using different strategies in order to communicate and learn the language. Although Selinker discusses five central processes which are responsible for this interlanguage, Jean D'Souza (1977) reduced those five processes into three as follows (1) transfer from previous learning experience; errors due to interference; (2) simplification and overgeneralization of elements of the target language system; errors due to learning strategies; and (3) errors arising from teaching methods and materials employed; 'teaching induced' errors.

The above points also all hold for phonology (see Ioup & Weinberger, 1987). The basic processes involved in how the learner deals with first language development are regarded by many linguists as 'universal', where these are the processes that are at the basis of all language (Jakobson 1941/1968). Language learners build up from these simple rules to greater complexity. The studies done in relation to the L2 acquisition of English syllable structure demonstrate this.

2.1.1 Acquisition of syllable structure

What kinds of errors are made when a learner is acquiring a language with a more complex syllable structure? Errors in relation to the acquisition of English syllable structure made by L2 learners with simple syllable structures, apart from being affected by their L1 background, are typically either consonant deletion or epenthesis that might not come from their L1. Oller's (1974) study is one of the first examinations of the strategies for syllable simplification employed by learners during the process of language acquisition. It was found that epenthesis in syllable-final position is the general characteristics among L2 learners, while consonant deletion is common for child L1 acquisition. A bit later, Tarone (1981, 1987) looked at syllable structure errors among adult English learners from Cantonese, Portuguese, and Korean backgrounds. She found that Cantonese and Korean speakers tend to use deletion, while Portuguese learners used vowel epenthesis. But her study and others have shown that the syllable simplification strategy in which learners in both L1 an L2 applied is that of consonant deletion to simplify initial and final consonant clusters (see Archibald and Young-Scholten 2000 for a review).

For children, Ingram (1989) also suggested that there are at least three situations in which clusters are reduced in English. These include: fricative /s/ reduction, e.g. when the first consonant in 'spot' is deleted and it becomes [pot], liquid /r, l/ reduction, e.g. when the second consonant in 'train' is deleted and it is pronounced as [tein] and nasal /m, n, ŋ/ reduction e.g. when the first consonant in the final cluster is deleted and 'bump' is pronounced as [bɒp]. Furthermore, clusters of three elements are reduced to one consonant e.g. when 'strong' is pronounced as [sɒŋ]. Do second language learners show similar patterns?

An early study that supported L1 influence was Greenberg (1983), who aimed to investigate how native speakers of different languages, i.e. Turkish, Greek, and Japanese acquire consonant clusters in L2 English. Three native speakers each of Turkish, Greek, and Japanese, were selected because of the difference from each other in their L1 and from L2 English in terms of syllable structure. Turkish does not allow syllable-initial clusters except in borrowings, Greek, on the other hand, does not allow syllable-final clusters, while Japanese allows neither. All subjects were intermediate-level ESL learners. Data were collected through two tasks, a picture description and a naming task involving flashcard pictures. It was found that syllable modification strategies which included consonant deletion were employed by Japanese and Greek speakers and epenthesis preferred by the Turkish speakers. L1 transfer was reflected not only in terms of contrasts in L1 and L2 consonant cluster inventories but also in terms of cluster position preferences.

In order to examine the L1-based and developmental patterns in the L2 acquisition of English initial clusters, Major (1992) tested four native speakers of Brazilian

Portuguese who learned English for 40 hours a week. Learners were exposed to English consonant clusters which do not exist in Portuguese, e.g. initial consonant clusters like /sl sr sp st sk pr br tr dr kr gr/ and many final clusters. Three samples of data were collected each week for four weeks. Data were obtained from learners reading a word list as well as recorded spontaneous conversation. It was found that the number of correct target-like utterances increases over time, and that transfer of L1 decreases. Developmental substitutions occur, but they change less in frequency.

A review by Young-Scholten and Archibald (2000) discusses studies that show while L2 learners transfer from their L1, they also have a variety ways of simplifying consonant clusters that do not exist in their first language phonologies, and they point out that adult learners often use interlanguage strategies such as epenthesis. Archibald (2002:16) concluded with respect to adults that the studies by Broselow and Finer (1991) by and Eckman and Iverson (1993) also "clearly demonstrates that syllable structure can be changed in L2 learning. People can learn to pronounce new clusters that are not found in their L1". It can thus be concluded that the acquisition of L2 syllable structure of English involves L1 influence and interlanguage strategies and is considered to be learnable by even adult L2 learners (as we shall see, studies show this might not be the case with stress).

A study that actually questions the idea that learners with more complex L1 syllable structure have no problems with English is Hodne's. Hodne (1981) conducted an investigation that aimed to gather evidence for the hypothesized universal preference for the open syllable to see whether modifications found showed movement toward

an open syllable. Subjects were two Polish women. They were chosen because their background language, Polish, shares many of the same complex syllable structures as English. The focus was upon errors made by the subjects that would not have to be attributable to transfer. These two women emigrated from Poland to the US. One was 24 at the time of testing and had been in the US for one year and ten months before the time of the study. The other was 29 and had been in the US for five months before the time of study. Both had no English exposure in Poland and were enrolled in community educational ESL classes at the time of the study. Two tasks were employed for data collection: oral interview with the aid of pictures, and watching a short videotape, after which they took turns describing what they had seen to another person who had not seen the film. Results showed that target language syllables were modified by (1) consonant deletion, (2) epenthesis, or (3) insertion of glottal stops but the answer to the question as to whether modifications that were found showed movement toward an open syllable was not conclusive. This shows that non-L1 processes can occur even when an adult learner's native language is as complex as the target language.

But few studies have been carried out on children's acquisition of a second language phonology. Sato (1987; see also Riney, 1990) carried out a study of younger learners on their acquisition of syllable structure. Subjects were two Vietnamese brothers who were about 10 and 12 years old upon arrival the United States. They were both without English exposure before arrival. Spontaneous speech data from unstructured informal conversation samples were collected at three points during the ten month study. Point 1 data were taken from week 2 and 3, point 2 data from week 19 and 20, and point 3 data from week 36 and 37 from the time of the arrival. Note that

Vietnamese is similar to Thai (as we will see below) in that they are both tonal and without consonant clusters in the colloquial language. The study showed that L1 transfer is reflected in Vietnamese English interlanguage as (1) a preference for the closed syllable in the modification of English syllable-final consonant clusters; (2) greater difficulty in the production of final than initial clusters; and (3) negligible use of epenthesis as a syllable modification strategy. These results were interpreted as evidence against Tarone's (1981; 1987) hypothesized universal preference for the CV syllable and the hypothesized prevalence of epenthesis as a syllable modification strategy in IL speech. The results from this study are relevant to the present study in that Vietnamese has a similar syllable structure to that of Thai, and as we will later see, errors made by these two learners are similar to those made by Thai learners in the present study. We will see that this is the case in both the baseline study, discussed in Chapter 3, and in the experimental study, results of which are discussed in Chapter 5.

A conclusion that can be made from these studies is that L2 learners of English with different language backgrounds (similar or different to the target language) whether in the target language setting or EFL setting or at different ages, all share common difficulties in acquiring complex syllable structure and make use of similar strategies.

2.1. 2 Acquisition of stress patterns

In every two or more syllables English word, there is always one syllable which is more prominent then the other(s). This is referred to as 'word stress'. A number of studies have been carried out by different researchers i.e. Kaye (1990), Archibald (1992, 1993, 1995), Pater (1997) and Altman and Vogel (2002), for example, in

relation to the L2 acquisition of word stress in English. Most of these studies were done with adult L2 learners. Studies have tried to investigate whether learners reset any metrical parameters which have different values in the L1 and L2. But in my study I did not intend to look directly into this area of access to principles and parameters of Universal Grammar (see Archibald, 1992) because we assume child L2 learners have access to UG (see below). However, we need to note here that errors produced by these L2 learners in terms of word stress seem to be influenced by transfer of their L1 stress system, and we can expect both child and adult learners to be influenced by their L1.

A study related to Thai - because (as we will see) both Thai and Chinese are tone languages - is Juffs (1990). He investigated how adults whose first language is Chinese acquire stress patterns in their L2 acquisition of English. The experiment was done with 19 first year undergraduates from Hunan Agricultural College, China. These students with a Mandarin speaking background had 160 hours' exposure to English in the college before the experiment started. Each of them was asked to read a passage of 105 words which had been taken from the text book. Results revealed that these 19 Chinese adult L2 learners of English had problems with acquiring English stress. It was found that errors with stress occur both in placement and in the phonetic process to mark it.

Related to stress is rhythm. The speaker must also produce the unstressed syllables in English as well as stressed ones. Strategies to deal with unstressed syllables include deletion. This is more typical of children (Ingram, 1974), but less so than of L2 learners (but see Young-Scholten, Akita, and Cross, 1999).

A study conducted by Fokes and Bond (1989) aimed to compare rhythmic patterns of non-native English speakers' productions with those of native English speakers. The study was carried out in the target L2 learning of English in the US. The investigation was carried out in a way that subjects' production data was examined in order to compare the quality of English reduced vowels produced by these subjects who were 3 American graduate students and 5 non-native speakers of English. These 5 non-native speakers with different language backgrounds of Farsi, Japanese, Spanish, Hausa, and Chinese enrolled in a class in English pronunciation designed primarily for graduate teaching assistants. All of them had a more than adequate knowledge of English for academic work at the university level. They had either completed the Ohio Program of Intensive English or met the proficiency level set by the program. The subjects were recorded while producing three tokens of each test word in isolation, in three different orders. The words included six two-syllable words, three three-syllable suffixed words, and three four syllable suffixed words. The subjects also produced the three-and four-syllable words three times in sentence context in answer to a question. Results revealed that the non-native speakers had most difficulty with the four-syllable words, producing a vowel of variable quality in the first syllable and failing to reduce the vowel of the second syllable. In addition, the non-native speakers failed to produce appropriate durations for vowels according to position in word and stress pattern.

In terms of the wider study of the L2 acquisition of stress, Archibald (2002:16; see also Pater, 1997) concludes that: (a) adult interlanguages do not violate metrical universals and (b) adults are capable of resetting at least some parameters to the L2

setting. Errors made by these learners are found to be both placing the stress on the wrong syllable of the words and in English vowel quality in the stressed or unstressed syllable being not right. As noted above, another factor that plays a major role in L2 acquisition is held to be age. In the next part, the notion of a critical period will be discussed.

2.2 The Critical Period Hypothesis

The role age plays in the acquisition of both a first and second language, and how this relates to the experimental study is discussed here.

Lenneberg (1967) first proposed that the ability to learn a native language develops within a fixed period, from birth to puberty. In general, two types of development of human ability can occur: 1) in some areas, the process can increase gradually or in stages, and 2) while in other areas, the development of an ability reaches its peak during a period of time early in life, and development starts to decrease when that period is over. In this latter type, the period at which the development of human ability develops to reach its peak is referred to as a 'critical period' (Lenneberg, 1967).

In language acquisition a critical period is held to play an important role. It has been suggested that learners are best able to achieve language competence during a maturationally limited period or critical period. This period begins early in life, and it is claimed that language acquisition must take place before the onset of puberty is complete (Lenneberg, 1967).

2.2.1. Age and first language acquisition

The classic example can be shown by a well-known case of Genie (Fromkin, Krashen, Rigler and Rigler, 1974). The case seems to best support the critical period hypothesis. Genie was a girl who was deprived of language and social interaction until the age of 13 when she got her first language input. After 7 years of rehabilitation, she still had minimal syntactic competence.

Another study supporting the Critical Period Hypothesis (CPH) for L1 acquisition is that of Newport and Supalla's (Newport, 1984; Newport and Supalla, 1987). Data were collected from congenitally deaf subjects for whom exposure to their first language, American Sign Language (ASL), may occur at varying stages. Ninety percent have hearing (speaking) parents, thus only small numbers are exposed to ASL from birth. The majority of deaf individuals are exposed to ASL when they enter schools for the deaf and associate with other deaf individuals; this can be as early age as four or as late as early adulthood. Subjects were categorized by age of exposure into three groups. Group one were native learners who were exposed to ASL from birth, group two were early learners who were exposed to ASL between the ages of four and six; and group three were the late learners who were exposed to ASL at age of 12 or later. Subjects were tested on their production and comprehension of ASL verb morphology. The results show that native learners scored better than early learners, who scored better than the late learners.

If there is a critical period for L1 acquisition, what is the situation for learners who already know another language?

2.2.2 Age and second language acquisition

In second language acquisition, the critical period is also thought to play a vital role. As for first language acquisition, 'critical period' or 'sensitive period' refers to the notion of an age-based constraint on the acquisition of full native fluency, in a second language; age limitations prevent adults from ultimately 'passing for native' in a second language, but not children (Patkowski 1982, 1990). Younger learners of a second language ultimately do better than their adult counterparts; the young learners' second language ability can develop to that of the native's while the older learners' cannot.

The pattern of achievement in L2 acquisition for both child and adult learners that can be identified is that child second language acquirers are usually superior in terms of ultimate proficiency, even though adults and older children may often display initially faster L2 acquisition rates (Krashen, Long and Scarcella, 1982). This is also echoed by Patkowski's (1982) emphasis that superiority of younger learners involves ultimate L2 proficiency and not speed of acquisition, though in some cases adults might show faster initial L2 rates (Snow and Hoefnagel-Höhle, 1978).

Many studies in relation to the critical period - that is, to age as a factor - in the second language acquisition of phonology show that the majority of post-puberty learners have difficulties in acquiring native competence in their L2 phonology, and younger learners are found to be more successful. This seems to show that age plays an important role in L2 acquisition. For example, an early study conducted by Asher and Garcia (1969) revealed that upon the arrival in the US, 71 Cubans with the

youngest age, ranging from one to six, were found to have the closest to native pronunciation. The next closest to native speakers were those who at the time of arrival were between seven and twelve years of age, while those who arrived later than nineteen were the poorest.

Flege (1987) and Patkowski (1990) claim that the Critical Period Hypothesis is built upon two major predictions: 1) speech acquisition, to be entirely effective, must take place before the hemispheric specialization of language occurs, 2) speech learning after the critical period both proceeds more slowly and is ultimately less successful than before the critical period.

Patkowski (1982) earlier investigated the L2 acquisition of phonology by two groups of learners. The first group included 33 L2 acquirers who began acquiring English from five to 15 years old; the other group included 34 subjects who began L2 acquisition after 15 years old. A five-point rating scale was used to measure learners' achievement. The results show that the majority (32 out of 33) of the younger learners scored four to five, with 15 learners scoring five. But in the older learners' group, the majority (24 out of 34) scored from two to three; the highest score in this group is 4½ and there was only one learner who scored it.

Debate on when the critical period for language learning ends is still inconclusive, particularly for phonology. Scovel (1988) proposed that there is a critical period for the acquisition of the pronunciation of L2 and that learner at the age after 12 will not succeed to acquire native accent. For Patkowski, the critical period for phonology closes at 15. Krashen (1973) proposed the development of brain lateralization as

thought by Lenneberg to be completed with the end of the critical period at puberty is much earlier than puberty, around age of five. But completion at five or even puberty, however, does not seem to instantly block second language learners from acquiring any phonology in their second language. From the research, it is likely that children up at least to 12 still can acquire a second phonology to native speaker level.

Some researchers have suggested that there are multiple critical periods within the Critical Period for various subcomponents of the acquisition of language. Long (1990), for example, argued that the child's ability to acquire phonology ends at six, and morphology and syntax end at later ages. This may involve subcomponents of phonology, for example Lowenthal (1981) proposed that after the age of 12 to 13 native-like L2 accents seem uncertain to be acquired by learners, but that the critical period for suprasegmental phonology starts to end as early as six and soon after that for segmental phonology. What can still be concluded from this discussion is that L2 learners will certainly find it more difficult to acquire phonology after the age of puberty; in other words, the younger the learners are, the better their L2 acquisition will ultimately be.

In 1996, the Thai government introduced English to younger learners, at the primary school level. Based on the above discussion, there is good reason to expect that they will be more successful than those who have started English at the secondary school level. But the issue of classroom input arises.

2.3 Language Input

There are a lot of studies that have been carried out in relation to language learning inside the classroom and language learning in foreign language environment. Many studies have tried to look into L2 phonology acquisition in terms of the learner's age, motivation, experience and the like. But not many have been conducted in relation to language input for L2 learners acquiring a foreign language.

The prominent conception in relation to language input among SLA researchers is that of Krashen's (1981) "comprehensible input" hypothesis. The concept focuses on the way in which language is acquired by learners who acquire L2 through "intake" and understanding language which is a "little beyond" their current level of second language competence. An example that demonstrates how language can be learned through this concept is that a language learner already understands the phrase "Get your crayons". With a slight change of the phrase to "Get my crayon", the teacher provides appropriate linguistic input which cognitively challenges learner's linguistic ability. This is the process in which new linguistic knowledge can be built from prior knowledge of language of learners in a comprehensible way (Sowers, 2000). Consistent and comprehensible input provided by teachers is considered to be the input which is pegged to learners' level of ability; that is, it is the level of input just beyond their current level.

However, the "comprehensible input" hypothesis proposed by Krashen (1981) tends to look into the acquisition of second language in terms of syntax and morphology, while nothing is mentioned in relation to phonology. This is unfortunate. It is also unfortunate that he hardly considers the type of input learners receive in the

classroom. However, Cummins (1998:19) notes that most second language acquisition (SLA) theorists would agree--in some basic formulation of the issues--that formal L2 instruction is often unsuccessful because learners receive impoverished or insufficient input in the target language. In keeping with this idea, Young-Scholten (1995) also argues that one cannot arrive at a clear answer to the question regarding ultimate attainment of native-like competence (particularly among adult L2 learners) if the variables in relation to the input L2 learners receive are generally not controlled for when the data are collected. She points out that in a foreign language classroom where L2 learners receive aural input from teachers and peers with non-native L2 accents, this is still regarded as primary linguistic data by linguists and also treated as such the learners. This type of linguistic input functions as 'positive evidence' in that it is necessary for the acquisition of a particular language. A problem arises from this positive evidence when this type of input is L1-accented, when it deviates from whatever the standard is and it misdirects learners away from the target language. Thus this non-native-accented input functions as positive evidence but with negative effect.

In addition, the classroom input provided by teachers referred to as 'teacher talk' contains phonological characteristics which include an absence of the assimilation, reduction and deletions typical of natural running speech in English. Also not typical is where word boundaries are marked by released and/or aspiration of consonants rather than re-syllabification and the vowels in unstressed syllables are not be reduced. Young-Scholten (1995) confirms that in the L2 learning of phonology, aural input plays one of the most important roles. If L2 learners are exposed to insufficient and restricted input which results in the acquisition of non-target language forms, this

means that learners will be unable to achieve native competence regardless of the age that they are exposed to the input.

To sum up this discussion, we might say we are facing a difficult fact: positive evidence with negative effect will leave L2 learners with no chance to master the target language at the phonological level. The opposite should be true: positive evidence with a positive effect (from native speaking teachers, for example), will provide a better chance for pre-puberty classroom learners in the ultimate attainment of native competence in their L2 phonology.

2. 4. Fossilization

Related to the critical period is 'fossilization' which Selinker (1972) claims to be the phenomenon in which non-target forms produced by L2 learners become fixed in the interlanguage. Selinker says that fossilizable linguistic phenomena are linguistic items, rules and subsystems which speakers of a particular native language will tend to keep in their interlanguage relative to a particular target language, no matter what the age of the learner or amount of explanation and instruction he or she receives in the target language. We may find in a language class an advanced learner who is very skilful in communication yet still makes the same errors. An L2 learner may go on to achieve success in certain areas on language, however, s/he may return again and again to the same error in other areas, particularly phonology.

Let us now turn to the specific situation considered in this thesis: Thai learners of English. By comparing the characteristics of Thai and English syllable structure and stress, we can offer predictions regarding the problems Thai learners of English might

have. We will then turn to specific studies that show the problems adult Thai learners have with English phonology, with respect to syllable structure and stress. First we will have a look at Thai phonology.

2.5 Characteristics of Thai

2.5.1 Thai Vowels[1]

Here we look at the Thai vowels and consonants because Thai learners of English may substitute Thai phonemes for the target English ones rather than just delete them. The basic vowels of the Thai language, from front to back and close to open, are given in the following table, where the top entry in every cell is the symbol from the International Phonetic Alphabet.

In this part, as required by Dr. Mits Ota, all examples of either vowels or consonants or words in the Thai orthography/alphabet have been deleted and Tables 2.1, 2.2, 2.3 and 2.4 - which were originally from Wikipedia - have been adapted.

Table 2.1: Basic Thai vowels

	Front	Central	Back
Close	i	ɨ	u
Close-mid	e	-	o
Open-mid	æ	ɵ	ɔ
Open	a	-	ɑ

The vowels each exist in long-short pair: these are distinct phonemes, i.e. they form different words in Thai, but usually transliterated the same, for example, ***khao*** means 'he' or 'she' with a short vowel and it means 'white' with a long vowel. Both words,

[1] From http://en.wikipedia.org/wiki/Thai_alphabet.

however, are spelled differently in Thai. Table 2.2 demonstrates pairs of long-short vowel.

Table 2.2 Long-short vowel pairs

Long		Short	
IPA	Explanation	IPA	Explanation
a:	a in "father"	a	u in "nut"
i:	ee in "see"	i	y in "greedy"
u:	ue in "blue"	u	oo in "look"
e:	a in "lame"	e	e in "set"
æ:	a in "ham"	æ	a in "at"
ɨ:	u in French "dur" (long)	ɨ	u in French "du" (short)
ə:	u in "burn" (long)	ə	u in "burn" (short)
o:	ow in "bowl"	o	oa in "boat"
ɔ:	aw in "raw"	ɔ	o in "for"

The basic vowels can be combined into diphthongs as follows:

Table 2.3: Thai diphthongs:

Long		Short	
IPA	Explanation	IPA	Explanation
a:j	I in "I" (stressed)	ɑi,ɑj	I in "I
a:w	ao in "Lao"	aw	ow in "cow"
i:a	ea in "ear" (long)	ia	ea in "ear"
-	-	iw	ew in "new" (short)
u:a	ewe in "newer"	ua	ure in "pure" (short)
u:j	ooee in "cooee!"	uj	uey in "bluey"
e:w	a in "lame" + o in "poke"	ew	e in "set" + o in "poke"
æ:w	a in "ham" + o in "poke"	-	-
ɨ:a	u in French "dur" + a in "father"	-	-
ə:j	u in "burn" + y in "yes"	-	-
ɔ:j	oy in "boy" (long)	-	-
o:j	oe in "Chloe"	-	-

Additionally, there are three triphthongs (all of which are long, as shown in Table 2.4.

Table 2.4: Thai triphthongs

Long	
IPA	**Explanation**
iow	ee + aow
uɛj	oo + I in "I"
ɨɛj	u in French "dur" + I in "I"

2.5.2 Thai consonants

There are 21consonant phonemes in Thai. These are as shown in Table 2.5. While both /r/ and /l are given in the table, in colloquial Thai, /r/ tends to be replaced by /l/.

Table 2.5: The distinctive consonants of Thai

	Bilabial	Labio-dental	Alveolar	Alveolar-palatal	Palatal	Velar	Glottal
Plosive (Stop) unaspirated voiceless aspirated voiceless voiced	p p^h b		t t^h d			k k^h	ʔ
Affricate unaspirated voiceless aspirated voiceless				tɕ $tɕ^h$			
Nasal	m		n			ŋ	
Fricative		f	s				h
Lateral			l				
Flap			r				
Glide	w				j		

All of these consonants can occur in the initial position of a syllable and a word. There are few consonant clusters in Thai (see below), and in addition, only single consonants are found at the end of Thai syllables. Final singletons are further restricted to voiceless stops /- p, - t, - k, - ʔ/, nasals /- m, - n, - ŋ,/ and glides /- w, - j/; voiced stops and the sonorants /r/ and /l/ do not occur in final position. Final /-p, -t, -k/ in Thai, however, are not released. Finally, the /aɪ/ diphthong does not allow any consonant to follow it in the coda. As the list in (1) shows, all other vowels

and dipthongs shown in the tables above can precede any of the consonants allowed in final position. Lexical tone, which will be discussed below, is marked on these examples.

(1)	[kàp]	'with'
	[wát]	'temple'
	[rák]	'to love'
	[pʰrá?]	'monk'
	[ná:m]	'water'
	[tɕʰǎn]	'I'
	[tʰɔ:ŋ]	'gold'
	[da:w]	'star'
	[?ô:j]	'sugar cane'
and	[faɪ]	'fire'but not *[faɪn]

2.5.3 Consonant clusters

In Thai, consonants which can occur first in initial position in two-consonant clusters are the voiceless plosives /p,t,k,pʰ,tʰ,kʰ/. Position 2 is restricted to the class of the approximants: /r,l,w/. Thus, the possible two-consonant clusters are:/pr-; pl-; tr-; kr-; kl-; kw-; pʰr-; pʰl-; tʰr-; kʰr-; kʰl-; kʰw-/as shown in the examples in (2), and the summary in Figure 1.

(2)	[prʌ̀p]	'to fine'
	[plìan]	'to change'
	[triam]	'to prepare'
	[krò:p]	'crispy'
	[klàp]	'to return'
	[kwà:t]	'to sweep'

[pʰrá?] 'Buddhist monk'

[pʰlík] 'to turn over'

[tʰrítsadi:] 'theory'

[krîat] 'stressed'

[kʰlɔ:ŋ] 'canal'

[kʰwă:n] 'an axe'

Type of structure	
1. C(C)VC	1) CVC [kà?], [jók] 2) CCVC [prà?], [pʰram]
2. C(C)V:(C)	1) CV: [pa:], [mi:] 2) CV:C [tɔ:n], [pa:n] 3) CCV: [tri:], [pla:] 4) CCV:C [kʰlo:n], [pʰra:w]

Figure 1.1: Thai syllable structure

In standard Thai, the official language used, for example, on radio or television, these clusters are pronounced as clusters. But in colloquial Thai, there is a strong tendency for the second member of the cluster to be omitted. Thus [plìan]can become [pìan] in daily Thai conversation.

2.5.4 Tone and stress

The accents marks in examples (3) and in Figure 1 represent the lexical tones present in Thai. There are five standard tones in Thai, as follows:

(3) a) mid tone [kʰa:] 'to dangle'
b) low tone [kʰà:] 'kha (a kind of spice)'
c) falling [kʰâ:] 'price; to kill'
d) high tone [kʰá:] 'to trade'
e) rising [kʰă:] 'leg'

The phonological structure of Thai is based primarily on the monosyllable; that is, the majority of words are monosyllabic. Historically, polysyllabic words have most often been imported from Sanskrit and Pali; Buddhist terminology was a particularly fruitful source of these. In Thai, the position of stress in a polysyllabic word is invariable, with the final syllable always the most prominent.

Now we will have a look at the characteristics of the target language, English, in order to complete our contrastive analysis.

2.6 Syllable structure and stress and in English

2.6.1 English Syllable Structure

The most general or 'universal' type of syllable structure among languages of the world is CV, i.e. a syllable composed of a consonant followed by a vowel. (It is even also possible to have a one-syllable word that consists of only a single vowel sound: *eye, oh, ow*.) As the following examples show, many English words of one syllable follow this pattern, with an off-glide in American English. (What is presented here is from Kenworthy 1987.)

CV Pattern: English words

(4) see /sij/
pay /pej/
buy /baj/
you /yuw/

Many one-syllable English words also follow the pattern CVC. This is the next most common type of syllable structure found among the languages of the world.

CVC Pattern: English words

(5)

seem	/sijm/
paid	/pejd/
bite	/bajt/
dip	/dip/
bed	/dɛd/
mat	/mæt/
book	/buk/
goal	/gowl/
zoom	/zuwm/

Not all English vowels can occur in the CV syllable pattern, but all can occur in the CVC pattern. In English syllables, vowels form the core, whereas consonants occur at the outer limits, thus forming a package or a container for the vowels.

English has the property of consonant clustering, in which two or more consonants occur in sequence in syllable-initial or syllable-final position. In word-initial position there are many clusters of two consonants in English and some with three. With clusters of two, either the first sound is /s/or the second sound is an approximant (/l/,/r/,/w/, or /y/); in some instances both conditions hold:

(6)

Two: /sn-/snake; /sp-/speak; /sk-/sky; /pl-/play;

/pr-/pray; /kw-/quite; /hy-/hue; /py-/pure;

/sl-/slow; /sw-/swim

With initial clusters of three consonants, the first sound is always /s/, the second sound is a voiceless stop (i.e., p, t, k), and the third sound is one of the four approximants (i.e., l, r, w, y).

(7)

Three: /spl-/splash; /str-/strong; /skw-/square; /sky-/skew

In final position there are many more consonant clusters than in initial position. These clusters can consist of two, three, or even four consonants. Many clusters of two or three and virtually all clusters of four are the result of adding a plural /s, z/ or past tense /t, d/ inflection to a stem ending in two or three consonants.

(8)

Two: /-lb/bulb; /-md/seemed; /-rv/nerve; /-vz/loves

Three: /-rts/hearts; /-ldz/builds; /-sks/asks; /-mpt/tempt

Four: /-mpts/tempts; /-ksts/texts; /-ltst/waltzed

Consonant cluster configurations are shown in the table below:

Table 2.6: Chart of consonant cluster configurations in English

VC up, an, in	CV my, hoe, so	CCV pry, prow, free	CCCV screw, spray, stray
VCC old, and, ink	VCCC Olds, ants, amps	CVCCC tests, tenths, lunged	CVCCCC thirsts, texts, worlds
CVC bed, set, cap	CCVC bred, dread, stone	CVCC bald, sand, hunt	CCVCC brand, trains, swings
CCCVC strut, squat, sprain	CCCVCC struts, squats, sprained	CCVCCC slurps, prints, flirts	CCCVCCC scrimps, sprints, squelched

2.6.2 Word Stress

In English, and many other languages, one or more of the syllables in each content word (words other than the monosyllabic function words like *to*, *the*, *a*, *of* and so on) are stressed. Examples can be seen in: *ribbon*, *proportion* etc,. Stressed syllables are often defined as those syllables within an utterance that are longer, louder, and higher in pitch. It has been discussed (e.g. Celce-Murcia, Brinton and Goodwin, 1996 on teaching English pronunciation). that the difference between stressed and unstressed syllables is greater in English than in most other languages.

2.6.3 Primary and secondary stress and unstressed syllables

Words with vowels in unstressed syllables are pronounced as schwa. But look at the following examples: *athlete* and *contact.* Both syllables in these words are stressed but the first syllable receives stronger stress than the second. In these words, the second syllable receives some stress, i.e. it is not pronounced as schwa and it receives

secondary stress. In words with three-syllables like *acrobat*, *celebrate*, the first syllable of these words receives primary stress, the second syllable is unstressed and the final syllable receives secondary stress.

To indicate primary stressed syllables in phonetic transcription a superscript accent mark (ˈ) is placed before the syllable; to indicate secondary stressed syllables a subscript accent (ˌ) is used; unstressed syllables are not specially marked. Examples can be seen in a word like *kangaroo* which can be transcribed in phonetic transcription as/ˌkæŋgəˈruː/where the primary stressed is on the last syllable; the secondary stress is on the first syllable while the second syllable is unstressed.

Very often in words with more than one syllable, the syllables which don't receive primary stress may be unstressed and the vowels appear as schwa, represented by the phonetic symbol /ə/. In words like *college, atlas, contain, addition*, though there are many vowel letters represented in these unstressed syllables, all of them are pronounced in roughly the same way. Compared to the vowels pronounced in the stressed syllables in English, these vowels in the unstressed syllable are pronounced much shorter and quieter. The process by which these vowels are pronounced is described as *vowel reduction,* in contrast vowels in stressed syllables which are *full vowels.*

2.6.4 Stress assignment

Generally speaking the rules determining which syllable or syllables of polysyllabic English words bear the main stress are quite complex and subject to numerous exceptions. However, in the sections that follow, a few generalisations regarding the stress assignment in English words are provided.

The primary stress on two-syllable words is more likely to fall on the first syllable if the word is a noun and on the second syllable if the word is a verb. More than 90 per cent of all English nouns of two syllables are stressed on the first syllable, and more than 60 per cent of all English verbs are stressed on the second syllable. With words of three syllables, the major stress usually falls on the first or second syllable.

I have discussed earlier the research on learners from various L1 backgrounds (either languages with similar or different structure to that of the L2, English), research on

learners of different ages, and research carried out in either the target L2 or EFL settings where the only exposure to English is when it is taught in class. These studies show that learners have difficulties in acquiring English word stress patterns and syllable structure. Now that we have compared Thai and English, we can make some specific predictions. First, we saw that Thai has a simpler syllable structure than English. Here we can predict that Thai learners of English will have difficulty with consonant clusters in the onset that consist of /gl-/ or /br-/, for example, and with any final consonant clusters and with the final single consonants not allowed in Thai - such as /-sk/ or /-t/ - as well as all final single consonants preceding the diphthong /ai/. Second, we saw that Thai rarely marks stress because most Thai words are monosyllabic. The multi-syllabic words in Thai tend to mark stress on the final syllable. This predicts that Thai learners will either give the same emphasis to each syllable or they will stress the final syllable of multi-syllable English words. With respect to syllable structure, there is nothing obvious in Thai phonology to indicate how learners will simplify consonant clusters. Thai is monosyllabic and this would favour deletion over epenthesis, since epenthesis creates an extra syllable, which does not conform to Thai phonology. But there are studies specifically of Thai learners of English that can reveal this information and we now turn to these.

2.7 The second language acquisition of English phonology by Thai learners

Many studies that have been carried out - either in Thailand or in the US - in relation to the acquisition of English by Thai learners reveal that Thai learners of English across the proficiency levels have problems with both syllable structure and word stress patterns. The research also shows that those who should be the most proficient of all, namely teacher training college students who are preparing to be English

teachers, university students whose major subject is English and English teachers all have persistent difficulties in pronouncing English correctly. I will start the discussion with studies done in relation to syllable structure and then the discussion will move on to studies carried out on word stress patterns.

With regard to the acquisition of syllable structure by Thai learners of English, studies have been carried out among Thai learners in Thailand and in the target setting, in the US. The sequence of the studies we are going look at, in relation to syllable structure, is studies done with learners exposed at a young age and then move on to older learners.

A study on syllable structure acquisition by school-age L2 learners was done by Pojananon, Nitivorakunapun and Chaiphar (1994). They aimed to survey English phonological problems presented by beginning students in Northeast Thailand. Subjects were 147 Prathom 6 (6^{th} year beginning) students who were pre-puberty learners aged from 11-12 yeas old who had had 3 years of exposure to English. Students were administered a diagnostic test. The findings revealed that all English consonants in final position of English words were problematic for this group of learners, and phonemes such as /dʒ/, /ʒ/, /θ/, /j/, /ð/, /ʃ/ and /z/ were found to be problematic in all positions. As pointed out above, the majority of this set of phonemes do not occur finally in Thai.

Data were collected from slightly older intermediate learners in a study by Thananithisak (1989). Subjects were 1^{st} year students at the secondary school level. This study aimed to analyse errors made during the reading aloud of English words

by Thai learners. They were asked to read English words which were at the same time taped recorded. It was found that errors made by the learners were mainly deletion of consonants in English consonant clusters, especially in onsets. A similar study was done by Saraphon (1990), whose purpose was also to investigate errors made by intermediate learners of English when reading words. Subjects were 160 final year secondary school intermediate students at the Kamalasai secondary school, which is located in Northeast Thailand. Learners were asked to read English words from a word list. Results showed that clusters in all positions were found to be non-native-like for learners, and that they deleted consonants.

All three studies indicate that after three to six years of classroom English, errors in syllable structure persist, and that deletion, rather than epenthesis, is the strategy learners use to simplify consonant clusters that do not exist in English. This supports the prediction made in 2.6 above.

Data were also collected from older learners, in this case from students who preparing to be English teachers by Keawchompoo, Thadaniti, and Jaemroekjaeng (1972) to investigate problems of the pronunciation of final clusters. Subjects were first year students of a Higher Certificate degree from Phranakornsriayuthaya Teachers College. Data were collect when subjects were asked to read English words with final clusters. It was found that these students, too, had problems with English word-final clusters and they deleted consonants.

These four studies of Thai acquisition of English syllable structure point to some interesting conclusions. One is that these results are evidence against the predictions

of the CHP in that young, pre-puberty learners should be able to well in the second language acquisition of phonology. In the case of Thai learners, one of the reasons errors persist might have something to do with the input these learners had received in class, as discussed above. If input had been that from native speakers the results might have turned out differently. Another point is that the types of errors made with respect to the acquisition syllable structure, according to above studies, seem to extend across L2 English learners of all levels in Thailand. The results from Keawchompoo et al. (1972) are especially striking in that students who are preparing themselves to be English teachers demonstrated problems with the syllable structure of English. If these are the individuals will be the ones who will provide input to school-age learners, they will pass on the 'deviant' pronunciation to pre-puberty Thai learners, continually learner after learner. What can be concluded from these studies? First, these studies all used word list reading: spontaneous production might give different results. In fact, the learners might be better on word lists, if their reading style is like that of tv and radio presenters, where initial consonant clusters are pronounced in Thai, as discussed in section 2.5 above. At least spontaneous speech represents how people naturally talk, and the researcher's aim is to know what this is. Second, the most important study referred to was conducted some 25 years ago, and the current situation might be different, given the continued expansion of English as a lingua franca since the 1970s.

Is there evidence that learners exposed to native speaker input are better? A study by Prachanboribal (1959) of Thai students in the US investigated problems in pronunciation of English consonant clusters. Data were collected from nine Thai university students in Honolulu. Students were asked to pronounce a list of 22

English words which included clusters in both initial and final positions. The results revealed that three-consonant clusters were more difficult to pronounce for Thai students than two-consonant clusters. It was also found that clusters in the final position of English words caused more problems for learners than those in the initial position. This is expected because Thai allows initial consonant clusters in formal speech (on tv and radio). A hierarchical list of difficulty with the clusters for Thai learners is as follows: clusters with /z/ in final position as in 'shelves', clusters with /s/ in final position as in 'facts', clusters with /d/ in final position as in 'changed', clusters with /t/ in final position as in 'helped', clusters with /d/ in initial position as in 'dwell', and clusters with /l/ in initial position as in 'glass'. Although Thai allows initial clusters, in colloquial Thai, there is a strong tendency for the second member of the cluster to be omitted. These results show that this group of post – puberty L2 learners of English, even in the target setting, still have problems with pronunciation, and that their phonology might well have fossilized. However, this study was carried out a long time ago, and things might have changed in the last 47 years.

In relation to the acquisition of English word stress patterns by Thai learners, during the past three decades, a number of studies have been carried out with different learners. Janyasupharp (1982) conducted a study that aimed to analyse errors from the production of students majoring in English at teacher training colleges in Thailand. Subjects were 100 final year students of a Higher Certificate degree from four teacher training colleges in the central area of Thailand. Students were asked to read 180 words, 10 sentences, a 94-word passage and a dialogue, and their responses were tape-recorded. It was found that students had problems with English stress

patterns. The data revealed that the majority of multi-syllable words produced by learners were misstressed and that even Thai students majoring in English found it hard to pronounce English word stress patterns correctly. Janyasupharp (1982) gives little information on what the misstressing involved.

The same line of study was done by Kanoksilatham (1992), who aimed to identify and analyse errors made by third-year English major students in respect of stress and intonation. Subjects were 45 third-year English majors of Silapakorn University in the 1991 academic year. Unlike Janyasupharb's (1982) study, which involved words read, data were collected when subjects were asked to do oral presentations. Results showed that the subjects had most difficulty in pronouncing four-syllable words, with misplacement of stress on English words also evident. The study revealed that in most multi-syllable English words, final syllables seemed to be stressed by this group of learners, who were students trained to be English teachers. This is clearly influence of their Thai stress system, as discussed above.

Not only do students still studying have problems with stress, but once they become teachers of English they also find this problematic. Buato (1981) conducted a study to investigate problems of pronunciation for English teachers at the intermediate level. Data were collected from English teachers in secondary schools in Nakhornpathom province. 70% of the subjects were found to have problem with English pronunciation especially with stress patterns.

Apart from the data that have been collected for the studies done in Thailand, as was the case for syllable structure, there are also data on the acquisition of stress from

Thai learners in the US, in the target language setting. Kruatrachue (1960) carried out a research project for her PhD degree and conducted a comparative study of the sound system of Thai and English. Data were collected from 20 Thai students and showed that Thai learners had a tendency to place stress on the final syllable of English words. This again shows that even in the target setting of the US Thai L2 learners of English still have native-language based problems.

These studies in relation to the acquisition of word stress in English show similar results to those of syllable structure in that Thai learners of English, whether they are students majoring in English, English teacher trainees, or English teachers, all have difficulties in English word stress, especially in words with more than one or two syllables.

The conclusion that can be drawn from this entire discussion is that, in relation to the acquisition of syllable structure and word stress, across all levels Thai learners of English were having problems in up to the early 1990s in these two areas. This was the case whether they were in Thailand or in the target setting of the US. But what is striking is that English teachers as well as students who were preparing themselves to be teachers were found to have problems with pronunciation in both syllable structure and word stress. The studies of teachers have implications for those Thai students who ended up being taught by these English teachers, and is particularly important for primary school children who are within the critical period to hear input from teachers who can produce consonant clusters and correct stress in English.

Because these studies were conducted between 1959 and 1994, we cannot assume the same situation still exists in Thailand. There has been expansion of English through the internet or via satellite tv and more opportunities exist to spend time abroad, for example. In addition, English was introduced at the primary level in 1996, as noted earlier in this chapter. It is crucial to know whether the phonological proficiency of Thai learners of English in the groups discussed above has improved. And, as noted above, it is important that the data be based on spontaneously produced English if we assume that teachers speak rather than just read in the primary classroom. Therefore, before conducting an experimental study of primary school children whose beginning English phonology was the main focus of this thesis, I decided to conduct a cross-sectional study of Thai English learners from three different levels of proficiency, including university English majors, to find out whether they produce target-like English syllables and stress.

Chapter 3

Current achievement in English pronunciation in Thailand

3.0 Baseline study

Now we turn to a baseline study of current Thai learners of English in Thailand. The baseline study was conducted to gain insight into the situation of current achievement in English pronunciation among L2 learners of English in Thailand. The purpose of the study was to find answers to two questions which include: 1) whether problems of English pronunciation with these learners still exist; and 2) if problems still do exist, what types of problems these are. The results of this study will act as the stepping stone to pursue for the next level of this thesis, the main, experimental study. Assuming that the answer to question (1) will be 'yes', the experimental study will explore how Thai learners of English can be helped to improve their pronunciation.

This chapter will start with general information on background of the study and the scope of the study. The results and the discussion will then follow.

3.1 Background of study

The baseline study[2] was carried out in order to determine the pronunciation achievement of current learners of English in Thailand since English was introduced at the primary level in 1996[3]. It appears that the Thai government understands the advantage learners have if they start learning second language at younger age.

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[2] The study was carried out in 1998. The situation of how learners can get exposed to English is starting to change now with more chances for learners to get access to media e.g. satellite TV outside of class as English grows as a lingua franca.

[3] I will discuss this in more detail in Chapter 4.

Teaching English in Thailand involves an EFL setting, i.e. one where English is not an official, a semi-official, or native language of the society. Most often, language teaching occurs within a school or institutional setting to homogeneous groups of Thai speakers. There is no easy access to the target language outside of the classroom as all media such as on T.V. and radio tend to be broadcasted in Thai. Teachers in this setting are usually not native speakers of the target language and may speak a heavily accented variety of English (Buato, 1981), usually causing them to be reluctant to focus on pronunciation in the classroom and providing students with non-target like input, a general situation already noted in Chapter 2. As a result, learners' exposure to native-like English is often very limited or non-existent. The situation differs for level. English teachers in secondary school level are likely to have majored in English, while primary school level teachers are unlikely to have majored in English at university (they mostly major in Education). Once at university, students, especially English majors, have a better chance to communicate in English with their English speaking teachers, where native speakers are often employed in English departments.

School teachers do have access to supplementary aural materials. But most of the materials for beginners used in Thai classrooms are recorded by non-native Thai speakers of English. However, intermediate-level learners are provided by various publishers with a wider choice of native-speaker recorded materials, for example, recorded conversation for learners to practice both listening and speaking.

Because one might expect varying levels of phonological competence in English based on the above factors regarding input, a cross-sectional, baseline study was conducted to investigate this.

3.2 Scope of the study

Cross-sectional data were collected in 1998 from Thai learners of English at the primary school, secondary school and university level. At the university level, these were students who were both non-English and English majors. The purpose of this was to determine the achievement for students who have received the most input of any classroom learners in Thailand. The primary and secondary school learners in this study were living either in a rural area 120 kilometres west of Bangkok and the university students were those attending a university 400 kilometres northeast of Bangkok at the time of testing. Table 3.1 gives the background data for the 32 learners.

Table 3.1: Thai learners of English

Group	Level	Number of Subjects	Age	Sex	Number of years of exposure	Number of hours of language exposure per week
Beginner	2nd year primary school students	10	7-8	5 F 5 M	1	2.5
Intermediate	2nd year secondary school students	10	14-15	10M	5	5
Adult 1	1st year university students	7	19	4 F 3 M	10	3
Adult 2	3rd year university students majoring in English	5	21	7F	12	varies from 10 - 15

These four groups of learners were tested on their production of English words with initial and final clusters and varying stress placement.

3.3 Data collection

The data collection was conducted with the pure purpose of gathering general information about Thai learners' pronunciation problems. Thus no specific goal was initially set for which phonological features would be investigated when the data were collected. This meant that the methodology did not involve narrow elicitation. Once the data were transcribed classification of the data was made. After this, errors were identified and the next question was which area(s) of phonology should be paid more attention to for the experimental study. The answer came in terms of justification based on intelligibility (Kenworthy, 1987) in that L2 learners' pronunciation does not need to be that of exact native speaker pronunciation but it should be pronunciation where the main phonological features, for example, syllable structure and stress patterns, are correctly produced. According to Kenworthy, correct production here can prevent communication from breaking down. Hence English syllable structure, which includes clusters in initial position and single consonants and clusters in final position and stress pattern turned out to be the language features to studied in this thesis.

The data were collected by the experimenter through the implementation of language tasks that involved picture naming for all four groups and an informal interview for three of the groups. These pictures involved the words for the national curriculum for English for each level. Because a beginner's knowledge of English is quite limited, no data from an informal interview could be collected from them. Eliciting data was conducted through the use of a set of different 10 to 15 pictures which were selected from the supplementary materials for the curriculum of each level as well as from current magazines. A large number of pictures were prepared in case a learner could

not produce the word for the picture being presented and then s/he would be shown a new picture (even though pictures were based on the words learners were likely to know from the Thai English curriculum). Each subject spent about five to ten minutes naming pictures and being interviewed. The beginning learner or primary school subjects were asked to name what they see from the picture. The intermediate or secondary school students and the university-level learners were asked to introduce themselves before producing a sentence or two on what they saw in the pictures. Learners tended to say their names, their classes and their hometown, for example, when asked to introduce themselves. For the picture description, if a sentence could not be produced, a single word naming what they saw in the picture was acceptable. The two university student groups were encouraged to talk more about themselves and their background or their daily activities. A student from the university group, after self introduction might talk what subject s/he was studying, what s/he like to do or where s/he like to go, for example. After this interview, picture describing took place. Again at this level, if a sentence could not be formed, a word naming what was seen in the picture is satisfactory. All tasks were tape-recorded on a Sony Walkman model WM-GX612 and a Sony stereophonic microphone.

3.4 Data Analysis

It was mentioned earlier that the language features to be studied had not been decided before the data were collected. But once the data were transcribed by the experimenter and checked by a native speaker of English (a lecturer in the department of Western Languages and Linguistics at Mahasarakham University), data were classified in terms of syllable structure and word stress. As mentioned above, this was based on the intelligibility (Kenworthy, 1987 and as referred to in Chapter 1) that the

correct pronunciation of syllable structure and word stress lead to. It was also of interest to see how learners produced syllable structures that do not exist in Thai (as discussed in Chapter 2). In relation to syllable structure and stress pattern, the data are hence subdivided as follows:

1) Syllable structure which includes
    - clusters in both initial and final position in a word
    - single sounds in final position
2) Word (primary) stress

3.5 Results

Now let's look at the learners' achievement. I will talk about the production of syllable structure first then move on to the stress.

The aim of the baseline data collection is to look at achievement from three levels of learners which represent different periods of exposure to English in typical English classes in Thailand. Thus a score was first given to those language productions which were target like. After that the focus is on types of error made by these Thai learners. What types of errors were these? Were they the same types of errors found in other studies of Thai learners or in studies that have been conducted on learners from other backgrounds? The errors produced by these subjects were then classified based on previous research done in relation to English syllable acquisition and classified based on different types of strategy learners employed in their production of phonology. Errors are thus classified into the main strategies of deletion, substitution and epenthesis. Let us now look at the results.

3.5.1 Learners' production of syllable structure

Numbers in each column in Table 3.2 below represent percentage of language produced through each strategy. As for the set of numbers in the brackets, the first set of numbers refers to the actual number of language items produced through that strategy, while the set of numbers behind the slash refers to the total number of items of language produced by each group.

Table 3.2:Clusters (obstruent-liquid) in initial position

Learners	Initial Clusters			
	deletion	epenthesis	substitution	TARGET
Beginner (n=10)	78.00% (18/23)	0	9.00% (2/23)	13.00% (3/23)
Intermediate (n=10)	81.50% (110/135)	0	5.90% (8/135)	12.60% (17/135)
1st year non-major (n=7)	58.00% (46/80)	0	6.00% (5/80)	36.00% (29/80)
3rd year major (n=5)	6.00% (4/65)	0	2.00% (1/65)	92.00% (60/65)

Let us first look at how Thai learners of English, after a period of time learning in English classes in Thailand produced English words with initial clusters. Words produced by different levels might not be the same words but they can be different words with the same English language feature for example, a beginning learner might produce 'green' while an intermediate produced a word like 'brother' and an adult learner from the other two group might produce 'fruit' and 'umbrella'. It is true that words with initial clusters exist in Thai, but in colloquial pronunciation, the clusters tend to be deleted.

The third year university English majors performed the best in pronouncing target like English words with initial clusters. This was then followed by the first year students who were non-English majors. The beginning learners looked slightly better

than learners from intermediate group. The errors which occurred in the language production of these four groups of learners were mostly that of deletion then substitution while epenthesis was not employed by any group. Examples of substitution can be seen when a beginning learner produced [bru:] with a trilled /r/ for *blue*, an intermediate learner produced [gli:n] for *green* and a university English major produced [grɛ:p] with a trilled /r/ for *grape*.

Table 3.3 shows words which end in final /l/. Although some final consonants are allowed in Thai, /l/ does not occur in word-final position. The word list for final /l/ produced by the four groups of learners included words like *pencil*/'pɛnsɪl/ from the beginning learners, *small* /smɔ:l/ from the intermediate learners, *volleyball* /'vɒlɪbɔ:l/ from the adult non-English major learners, and *alcohol*/'ælkəhɒl/ from the adult English majors. However there are some examples of words that have been demonstrated and will be demonstrated which do not strictly belong to a specific group only, for example *alcohol* /'ælkəhɒl/ was only produced by both adult groups while a word like *pencil*/'pensl/ was almost produced by all learners in all groups.

Table 3.3: Final /l/

Learners	deletion	substitution	TARGET
Beginner(n=10)	37.00% (7/19)	63.00% (12/19)	0
Intermediate(n=10)	75.60% (31/41)	24.40% (10/41)	0
1st year non-major(n=7)	94.00% (15/16)	6.00% (1/16)	0
3rd year major(n=5)	18.20% (4/22)	4.50% (1/22)	77.30% (17/22)

With respect to English words with final /l/, the table again show that the third-year majors were again the most successful to produce this set of words. The other three groups could not manage to produce any target-like English words with final /l/. Instead they tended to delete the /l/ consonant or substitute it with another consonant. It was found that the most frequently substituted consonant among these learners was /w/. Examples can be seen when *pencil* was pronounced as a ['penˈsɪw] by the beginning learners or the intermediate learners produced[bɔw] for *ball.* Recall that Thai allows /w/ in final position.

Like that of final /l/ sound, the words with the set of final sounds after final /ai-/ are not allowed in Thai. The examples of this set of words, shown in Table 3.4, included words learners attempted to produce like *knife*/naɪf/ *life*/laɪf/ *like*/laɪk/ *ice*/aɪs/ *wine*/waɪn/, for example.

Table 3.4: Final /n/, /t/, /v/, /s/ after /aɪ/

Learners	deletion	substitution	TARGET
Beginner(n=10)	100.00% (20/20)	0	0
Intermediate(n=10)	100.00% (22/22)	0	0
1st year non-major(n=7)	93.75% (15/16)	6.25% (1/16)	0
3rd year major(n=5)	54.50% (6/11)	0	45.50% (5/11)

Apart from the final clusters (which we are going to talk about soon), this set of words seemed to cause the biggest problems to all learners. Even the learners from the English major group - who did the best on this set of words – could only manage to produce 45.5% of target-like pronunciation. Most of the group preferred to delete

the final consonant in these words. So a word like *life* was pronounced as [laɪ]. As for the strategy of substitution, the only group to employ this was that of the adult non English major learners who, for example, produced [naɪt] for *knife*.

Table 3.5 treats the final stops which are allowed in Thai words, but when pronounced they are unreleased. It is interesting to see how Thai learners acquire English words with final stops.

Table 3.5: Final stops /t/,/k/,/d/,/g/,/p/

Learners	unreleased	substitution	TARGET
Beginner(n=10)	92.31% (24/26)	7.69% (2/26)	0
Intermediate(n=10)	96.70% (89/92)	3.30% (3/92)	0
1st year non-major(n=7)	59.00% (20/34)	0	41.00% (14/34)
3rd year major(n=5)	36.00% (17/47)	2.00% (1/47)	62.00% (29/47)

From the table, again, the learners from the adult group majoring in English did the best followed by the other adult group who were non-majors while the intermediate learners were the weakest. When facing difficulty in pronouncing words with final stops, learners across levels tended not to release the final sound of the words as seen in [i:t˺] for *it*, [bæk˺] for *black*, and [waɪo:let˺] for *violet*, for example. Some substitution can be seen in [buk˺]for *book*, [lɛ:s] for *red*, shirt[tʃɜ:s] for *shirt*, for example.

These sets of final clusters which are not allowed in Thai include /-lv/ /-nt/, /-nd/, /-ns/, /-ndʒ/, /-kt/, /-sk/, /-st/ /-ŋk/, /-ks/. These seem to be the most problematic for all learners, as Table 3.6 shows.

Table 3.6: Clusters in final position

Learners	deletion	substitution	TARGET
Beginner(n=10)	75.00% (9/12)	25.00% (3/12)	0
Intermediate(n=10)	84.00% (42/50)	16.00% (8/50)	0
1st year non-major(n=7)	76.00% (16/21)	19.00% (4/21)	5.00% (1/21)
3rd year major(n=5)	47.00% (16/34)	12.00% (4/34)	41.00% (14/34)

Though the adult learners majoring in English performed the best, they could manage to make 41% (not even half) target-like pronunciation while the other adult group came second, but at only 5%. The learners from the beginning and the intermediate could not manage to produce any target-like pronunciation. Deletion seems to be the most common choice for Thai learners to solve with the problem of final clusters, and the last phoneme of the cluster was deleted. Examples can be seen when [tiŋ] was produced for *think*, [wɔn] for *want* [ɔ:ren] for o*range*, for example. Substitution (sometimes along with deletion) can be seen when [ɔ'leŋʃ] was produced for *orange*, [twew]was produced for *twelve*, and [mʌʃ]was produced for *must*, for example.

3.5.1.1 Discussion of syllable structure production

The data reveal that all levels of Thai learners of English, except those who are 3rd year students majoring in English, have problems with pronunciation in every aspect of English syllable structure involving consonants. This reflects the results from the studies conducted in relation to the second language acquisition of English phonology by Thai learners reviewed in Chapter 2.

In respect of words with clusters in initial position, as in those of obstruent-liquid clusters, learners tended to delete the liquid consonants which are in the second position of the clusters. As for the words with final stop sounds, productions were of unreleased final sounds. In other aspects of production for words ending with /n/, /t/, /v/, /s/ after /aɪ/ such as 'nine' or 'five', words ending with /l/ and words ending with clusters, learners tended to delete these phonemes. Only 3rd year English students majoring in English seem to do very well in most aspects when pronouncing English syllable structure. They, however, still find it a bit difficult to pronounce words ending with /n/, /t/, /v/, /s/ after /aɪ/ as in words like 'nine' or 'five', and those ending with clusters. It can be concluded that across the levels Thai learners of English, except for those who are 3rd year student majoring in English, have problems to pronounce English words with clusters in both initial and final positions. They also have problems with pronouncing final single consonants.

We will now have a look at how Thai learners of English pronounce English words in relation to stress patterns. Let us see how Thai learners of English with tonal language background of Thai will cope with English stress.

3.5.2 Learners' production of stress patterns

With respect to the production of English stress patterns, again, the goal was the same - to look at the achievement each group after a period of time spent learning L2 English in Thailand. The data analysis thus first considers the target like production. When the data were first transcribed and a rough look taken at the data, it seemed to show that the majority of errors made by these learners in relation to English stress pattern were when learners equally assigned stress on all syllables of multi syllable words. So the main focus of the discussion in relation to English stress patterns will mainly deal with this type of error.

Table 3.7: Two-syllable words with initial stress

Learners	final	equally stressed	TARGET
Beginner(n=10)	4.00% (4/100)	57.00% (57/100)	39.00% (39/100)
Intermediate(n=10)	14.50% (32/221)	58.40% (129/221)	27.00% (60/221)
1st year non-major(n=7)	1.00% (1/95)	34.00% (32/95)	65.00% (62/95)
3rd year major(n=5)	0.00% (0/118)	13.00% (15/118)	87.00% (103/118)

In relation to the production of two-syllable words with initial stress, learners from the 3rd year university majoring in English were the most successful followed by those from the group of 1st year university learners. The other two groups, beginning learners and intermediate learners, seem to have problems with the primary stress in this type of word. It tends to be the case that Thai learners of English across the levels solve the problem of stress by putting an equal stress on each syllable of these two syllable-words, suggesting they are not sure which syllable should receive the stress.

Examples can be seen in ['fut'bɔw] for *football*, ['sæn'wɪt˺]for *sandwich*, and ['æ:'plɛ:n] for *airplane*.

Table 3.8: Two-syllable words with final stress

Learners	initial	equally stressed	TARGET
Beginner(n=10)	5.00% (1/19)	95.00% (18/19)	0
Intermediate(n=10)	9.00% (3/33)	91.00% (30/33)	0
1st year non-major(n=7)	57.00% (13/23)	39.00% (9/23)	4.00% (1/23)
3rd year major(n=5)	39.00% (9/23)	35.00% (8/23)	26.00% (6/23)

The two-syllable words with final stress seem to cause greater problems for all levels of learners; though the 3rd year university students majoring in English are the most successful, they could manage to produce only 26% with correct stress. Beginning and intermediate learners still use the same strategy as with initially stressed words, pronouncing these words with equal stress in production such as ['gud'baɪ] for *goodbye*, while learners in the other two groups misplace the stress on the initial syllable of these words to cope with the problem of pronouncing the two-syllable words with final stress as seen in words ['hello] for hello and ['gi:ta:] for guitar.

Table 3.9: Three-syllable words with initial stress

Learners	misplaced	equally stressed	TARGET
Beginner(n=10)	0	100.00% (6/6)	0
Intermediate(n=10)	41.50% (27/65)	55.40% (36/65)	3.10% (2/65)
1st year non-major(n=7)	6.00% (2/34)	47.00% (16/34)	47.00% (16/34)
3rd year major(n=5)	19.00% (8/43)	24.00% (10/43)	58.00% (25/43)

The 3rd year university students majoring in English, again, were the most successful in pronouncing three-syllable words with initial stress and the 1st year university students came second. The other two groups could not quite manage to pronounce them correctly at all. When faced with the problem of pronouncing three-syllable words, Thai learners of English tend to place an equal stress on the all syllables of these words like ['baɪ'sɪ'kɜn] for *bicycle* [sætɜdɛ:] for *Saturday*, [tɛ:lɛ:fo:n] for *telephone*. Mistressing occurred in words like[bɪw'tɪ:ful] for *beautiful*.

Table 3.10: Three-syllable words with penultimate stress

	misplaced	equally stressed	TARGET
Beginner(n=10)	-	54% (7/13)	46% (6/13)
Intermediate(n=10)	25% (7/28)	53.6% (15/28)	21.4% (6/28)
1st year non-major(n=7)	14% (3/22)	45% (10/22)	41% (9/22)
3rd year major(n=5)	17% (3/18)	28% (5/18)	61% (11/18)

With respect to the three-syllable words with penultimate stress, the 3rd year university students majoring in English were still at their best while, surprisingly, beginning learners came second. This might be because, with their limited knowledge of vocabulary, they found words like 'good morning' and 'banana' from their daily English class easy to pronounce. It is possible that this is due to the small sample size for this set of words. Again, most learners, when facing the problem of pronouncing this set of words, tended to place equal stress on the all syllables of these words as in

words like ['bɑ:'nɑ:'nɑ:], except for intermediate learners who tended to misplace the stress on the syllable of these words like [ʌmbrɛ'lɑ:].

Table 3.11: Three-syllable words with final stress

Learners	misplaced	equally stressed	TARGET
Beginner(n=10)	0	100.00% (2/2)	0
Intermediate(n=10)	27.30% (3/11)	72.70% (8/11)	0
1st year non-major(n=7)	0	100.00% (1/1)	0
3rd year major(n=5)	22.00% (2/9)	56.00% (5/9)	22.00% (2/9)

The three-syllable words with final stress seemed to cause problems to all levels of Thai learners of English. Only the 3rd year university students majoring in English could manage to pronounce them correctly, but only 22% of the time. A similar solution employed by Thai learners of English when facing the problem of pronouncing these words was to pronounce every syllable equally stressed in words like ['se'wen'ti:n] or ['mæg'gɑ:'zi:n].

Table 3.12: Four and more syllable-words

Learners	misplaced	equally stressed	TARGET
Beginner(n=10)	0	0	0
Intermediate(n=10)	31.60% (6/19)	68.40% (13/19)	0
1st year non-major(n=7)	29.00% (5/17)	71.00% (12/17)	0
3rd year major(n=5)	50.00% (4/8)	25.00% (2/8)	25.00% (2/8)

In relation to the four and more syllable words, the results were quite similar to that of the three-syllable words with final stress. The 3rd year university students

majoring in English still did the best though they could only achieve 25% correct. All learners tended to put equal stress on all syllables. Examples of the misstressed words and equally stressd words are seen as follows [rɪ:fɪddʒə'reitɜ:] for *refrigerator*, ['mɔ:'tɜ:'sɑɪ'kɜn] for *motorcycle*, ['he'lɪ'kɒp'tɜ:] for *helicopter*.

3.5.2.1 Discussion of stress patterns production

The stress patterns of English words examined in this baseline study include two-syllable words with initial stress and final stress, three-syllable words with initial stress and penultimate stress and final stress, and four or more syllable-words with stress on various syllables. Across all aspects of these stress patterns of English words, only three stress positions, namely two-syllable words with initial stress, three-syllable words with initial stress and three-syllable words with penultimate stress, were pronounced correctly more than 50% of the time, but only by the 3rd year students majoring in English. Other learners could not manage to produce anything more than 50%, apart from the first-year university students, who could manage to produce 65% correctly for two-syllable words with initial stress. The rest are found problematic for all learners, including the 3rd year students majoring in English. The most common strategy employed by Thai learners of English to cope with the problem of choosing which syllable of a multi-syllable word in English to assign primary stress was to pronounce every syllable in the word equally stressed. To wrap up, learners across all levels seem to have greater problems with stress patterns in English as the number of syllables increases, and though the 3rd year students majoring in English could manage to do better than the rest, they still have problems

with two-syllable and three-syllable words with final stress, and four or more syllable words.

Both the syllable and the stress results raise the question why adults majoring in English were able to do better that the other three groups in all respects. Is it because they have spent more years learning English? Or is it because of the type of input, which was from native speakers of English, that is, the input they received through their years of majoring in English.

3.6 Conclusion

As a teacher of English in Thailand, I found these results quite alarming. Through their long years of exposure to English, i.e. 5 years for the intermediate level learners and 10 years for the first year university students, their English pronunciation does not seem to have reached a level of intelligibility - the basic goal for pronunciation teaching. Perhaps this is not so alarming, given that native-speaker recorded materials are seldom used in English classes by Thai teachers, and there is little other exposure to English from native speakers, as discussed in Chapter 2.

In order to consider how to address this problem, we are next going to have a look at the advice on pronunciation teaching given by various experts in this area before turning to the main, experimental study. The main study will focus on young beginning learners because English is now introduced at the primary level in Thailand. If young learners have an advantage, how should teachers teach pronunciation to children to make use of their ability to learn?

Chapter 4

Teaching pronunciation

4.0 Introduction

To provide the pedagogical context for this study, Chapter 4 will start out with an introduction to the national curriculum for teaching English in Thailand, at the newly introduced primary school as well as secondary school levels. I will first illustrate the background of English Language Teaching (ELT) in Thailand and then focus specifically on how pronunciation is treated. I then review of how pronunciation is recommended to be taught by a range of experts. The chapter concludes with a discussion of language input and the notion of intelligibility to arrive at a recommendation for how pronunciation should be taught at the primary level. This establishes the basis for the experimental study, which is discussed in Chapter 5.

Let us have a look first the primary school level[4].

4.1 English Course Structure for Primary Level Schools in Thailand

By 2002 - six years after 1996, the year in which English was introduced to primary 6½ -7-year-old school learners by the Thai government, every Thai learner will have spent six years learning English from Primary school level 1 to Primary school level 6 before s/he finishes the normal primary education in Thailand. The new English curriculum has also been implemented since the introduction of English to young Thai learners. For the six years in primary school, the English curriculum can be summarised as follows:

There are three levels of proficiency of English teaching which include;

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[4] Ministry of Education 1996. English Syllabus. Bangkok: Kurusapa Printing.

1. 'Preparatory' Level ranging from Primary 1 – Primary 2
2. 'Literacy' Level ranging from Primary 3 – Primary 4
3. 'Beginner' Level ranging from Primary 5 – Primary 6

There are two terms or semesters in each academic year in the school system in Thailand; each term consists of about 20 weeks. At the Preparatory Level, English is started in the second term of Primary 1. Every learner will learn English six periods a week. Each period consists of 20 minutes in primary school and 50 minutes in secondary school. There are also six periods a week for English classes at the Literacy Level while at the Beginner Level; a learner will spend 15 periods a week learning English.

Table 4.1: Time spent in English classes at different proficiency levels

Preparatory Level		Literacy Level		Beginner Level	
Primary 1	Primary 2	Primary 3	Primary 4	Primary 5	Primary 6
6 p/wk Start in 2nd Term	6p/wk	6p/wk	6p/wk	15p/wk	15p/wk
120p/yr	240p/yr	240p/yr	240p/yr	600p/yr	600p/yr

p = period, wk = week,1 period = 20 minutes ,1 term = 20 weeks

4.1.1 Course description and objectives

4.1.1.1. Preparatory Level

According to the national curriculum, at this level, the aim is to build a background or to lay a foundation of English through natural processes, focusing on listening and speaking. Learners are encouraged to get involved in class activities like games and songs that make them feel relaxed, happy and enjoy themselves through using easy and simple English in preparation for the communicative use of English. Vocabulary

at this level includes words for people, animals and things within learners' range of daily use. Learners learn simple verbs, for example those of movement, for basic use of language for communication. Learners are also encouraged to get involved in activities either within or outside the English syllabus to create good attitude towards learning English. These and additional objectives are presented here:

Preparatory Level Objectives

1. Use English as a means of communication in the right situation
2. Listen to and follow simple instructions/commands
3. Communicate in English in accordance with learners' proficiency level
4. Pronounce English letters / words and short sentences to convey the correct meaning
5. Have a good attitude towards learning English

4.1.1.2. Literacy Level

At the next level, learners start to learn how to read and write simple/basic English. They are expected to be able to spell the words learned from previous listening and speaking at the Preparatory Level. Learners are encouraged to use English for communication in listening, speaking, reading and writing through activities that create pleasure and enjoyment. They practice penmanship in English and learn how to write answers to simple questions in English. They also learn how to use English for social and cultural communicative purposes in accordance with this proficiency level. Finally, they learn vocabulary: nouns and verbs for daily language use, and they expand this vocabulary for understanding printed matter like books, dictionary and other type of print media. This helps enlarge learners' range of knowledge and encourage learners to have good attitude towards learning English.

Literacy Level Objectives

1. Communicate in English with listening, speaking, reading and writing in accordance with level of proficiency

2. Listen and speak and have a conversation in English in simple situations

3. Read and write and spell in English printing letters and word as well as learn how to use punctuation marks

4. Learn how to use the dictionary

5. Have a good attitude towards learning English

4.1.1.3. Beginner Level

This is the highest level of primary school English, after the Preparatory and Literacy levels. Learners at this level are encouraged to use language correctly in terms of forms and to use it properly in social language use. They learn to use English in a greater variety of situations through listening, speaking, reading and writing English in real situations. They learn more vocabulary, expanding their vocabulary of daily use. They also learn how to use paralinguistic language (gestures) and stress, intonation and rhythm to convey meaning properly in actual social situations of language use. They are encouraged to use media including the dictionary for sources of more knowledge and for development of language. A good attitude towards English and the benefit of using English continue to be important.

Beginner Level Objectives

1. Communicate in English in listening, speaking, reading and writing in accordance with level of proficiency

2. Use English as foundation for the next higher level

3. Listen and speak and have a conversation in English, practice reading aloud and reading comprehension

4. Communicate through writing, be able to write in both print and cursive/ joined-up writing, spell correctly and know how to use punctuation marks

5. Use English as a medium for more knowledge through various media like printed matter and dictionaries

6. Learn about the culture through context of communication

7. Have a good attitude toward English and build good reading habits

Table 4.2 provides a full summary of what we have discussed above.

Table 4.2: Overall Structure of English courses for primary school level in Thailand

Proficiency Level	Class Level	Coursework and Time Allocation
1. Preparatory Level	Primary 1- Primary 2	- Preparatory English - 3 terms starting in 2nd term of Primary 1. - 6 periods/week
2. Literacy Level	Primary 3 – Primary 4	- Literacy English - 4 terms - 6 periods/week
3. Beginner Fundamental Level	Primary 5 – Primary 6	- Fundamental English - 4 terms - 15 periods/week

4.2 English Course Structure for the Secondary School Level in Thailand

A student at the secondary school level in Thailand will spend six years in learning English through the normal secondary school education system. Class structure and how English classes are offered at the secondary school level can be shown as follows:

All classes can be divided into 2 levels:

1. Lower Secondary school level, including Secondary School Level 1, 2, 3
2. Upper Secondary school level, including Secondary School Level 4, 5, 6

The structure of English courses for the two main levels is the same. At each level, a four-period-per week core course in English is given to mainstream learners per term; at these two levels a period is 50 minutes rather than 20 minutes. Only those who choose to study in the programme of English and Sciences or the programme of English and Mathematics at the Lower School level as well as at the Upper Secondary school level those who choose to study the programme of Arts and Languages and the programme of Arts and Mathematics take another extra two periods per week per term of two English courses which focus on the skills of Listening-Speaking, and Reading-Writing. How English courses are given to secondary school learners is shown in Table 4.3 below.

Table 4.3: Structure of English courses for secondary school level in Thailand

Level	Class Level	Coursework and Time Allocation
1. Lower Secondary school level	Secondary School level 1-3	- 4 periods/week of core-course English
	Secondary School level 1-3 Programming in either English-Sciences or English-Mathematics	- 4 periods/week of core-course English and - 2 periods/week extra course of English in Listening-Speaking, and Reading- Speaking
2. Upper Secondary school level	Secondary School level 4-6	- 4 periods/week of core-course English
	Secondary School level 4-6 Programming in either Arts-Languages or Arts-Mathematics	- 4 periods/week of core-course English and - 2 periods/week extra course of English in Listening-Speaking, and Reading- Speaking

1 period = 50 minutes

The English core courses aim to prepare learners by giving them general knowledge of how English is used in communicative situations in their real life. The density of content gradually increases from early levels onwards. As for the extra courses, the aim is to focus learners on the use of specific skills in English language either in Listening-Speaking skills or Reading-Writing skills for communicative purposes. However, the overall goal of language learning in Thailand is to equip learners with capability to use English for communication.

It can be noted here in relation to the curriculum at both primary and secondary school levels, that though the objectives of the English language curriculum in Thailand have been well designed to lead learners to an ultimate goal of English language for communication, when it comes to the translation of the curriculum into practice in English classes, there is reason to suspect that things do not seem to go as designed. This is illustrated in the next part, but only with reference to pronunciation, as this is the topic of the thesis.

4.3 Background on ELT in Thailand and review of pronunciation teaching

Here I will give the general background of the situation of how pronunciation teaching has been carried out in primary and secondary schools in Thailand and discuss what Thai teachers' level of English currently appears to be.

4.3.1 Background on ELT in Thailand and how pronunciation is taught in Thailand

Every Thai learner, as a product of a normal education system in Thailand, will leave upper secondary school at the age of about 19 with a minimum of eight years of at least four hours a week of exposure to English as part of the typical school curriculum. From 1996 the amount of exposure has increased, as shown above. Several decades before this, in 1978, the Ministry of Education, believing in the importance of using English as a global language, introduced the Communicative Language Teaching (CLT) approach to teaching English to schools in Thailand to replace the long-reigning traditional grammar translation method. This meant that a new national curriculum to serve this new language teaching approach was to be implemented. Some kind of training to help teachers deal with the new methods has been provided by the government and the private sector, for example by publishing companies. English teaching is, however, still treated pretty much the same as before 1978 by the majority of the teachers. It is taught with a focus on language rules and grammar rather than as language in communicative use. Perhaps any or all of the following reasons might well justify the situation: Thai teachers of English have not been well-equipped with the English proficiency to cope with the new CLT approach, despite the training to help teachers deal with the new approach which has been provided; the university examination system in Thailand still relies on knowledge of the grammar of English. This has led to a situation where teachers often reject activities based on communicative language teaching, where learners get involved in various types of communicative activities, because they cause a problem for class discipline (Buato, 1981: 1-7). Teachers do seem to know the theory, but they find it problematic to translate from theory into practice (Chaiwipanon, 1990:1). Teachers

also believe that doing communicative language practice activities in class are difficult to manage owing to the large size of classes which includes 45-50 students. Finally, learners have few chances for language practice outside class and textbooks for classroom use are mainly prepared abroad and both content and activities do not easily transfer to the Thai context (Torat, 1989: 53).

Like many other countries in the world nowadays, the context in which English is taught in Thailand is regarded as an English as a foreign language (EFL) context where English is treated as a school subject. It is still the case that Thai learners have very limited opportunity to use English outside the classroom or to be exposed to English spoken by native speakers. All foreign programmes and films on TV are normally dubbed in Thai. Foreign films with English soundtrack as well as satellite or cable TV are available only in few major cities. Thai films and Thai pop music are currently more popular among Thai people than those films and pop music from abroad. Learners at the secondary school level do have a better chance to get access to computers or the internet and to facilities like video equipment than those at the primary school level. However, Thai learners either from secondary or primary school level in rural areas have fewer opportunities for exposure to English outside school.

As noted above, grammar and reading rather than communicative activities are still the most frequent activities in English classes (Chaiwipanon, 1990), and pronunciation teaching seems to struggle very hard to find a place in Thai English classes. When every new English word is first used in a class in Thailand, the teacher typically orally model the word. Repeating what the teacher has pronounced in Thai-

accented English might, however, be the only chance the students have to specifically practice their pronunciation.[5]

At the primary school level, especially at the Preparatory Level, learners actually have more opportunities for pronunciation practice because they have not yet learned to read and they are not cognitively ready for explicit grammar instruction. A teacher typically orally introduces a list of new words him/herself, along with the pictures and then later the spelling of the words at Literacy and Beginner Levels. Practice is then carried out through drills in which the learners repeat after the teacher. Every morning before the beginning of the class or/and every afternoon before leaving school, rehearsal might also take place through the choral chanting of those words from the list. The teacher may correct every occurrence of an error.[6] At both the primary and secondary school levels, the models for pronunciation are provided by teachers whose English pronunciation is likely to be influenced by Thai[7]. In a normal English class, where a class might consist of about 25-40 students at the primary school level and about 45-50 students in secondary school level, the teacher tends to take control of the class in all aspects while learners always follow the teacher's lead.

To be an English teacher at the primary school level in Thailand one must qualify with a higher degree in education in English language teaching, which generally takes

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[5] As can be seen in example of classroom pronunciation practice for primary school in appendix C.

[6] From a classroom observation by experimenter

[7] These points are based on my own observations as a former secondary school English teacher in Thailand, and currently as a university lecturer who is partly in charge of training future English teachers. While collecting data from classroom teachers regarding their English pronunciation was beyond the scope of this thesis, the Baseline study data support the conclusion regarding Thai English teachers' accents.

two years in a teachers college, or a bachelors degree majoring in English or in English Teaching, which takes four years in a teachers college or a university. For the secondary school level, one must qualify with a bachelor's degree or higher degree in English or English Language Teaching. To pursue a bachelor's degree either majoring in English or English Language Teaching from either a teachers college or a university, one normally takes four years. It tends to be the case that most English teachers in Thailand hold a bachelor's degree majoring either in English or English Language Teaching. Courses given to those who are going to be English teachers include methodology of teaching language skills like listening, speaking, reading and writing for example. Some courses are also given by native speakers of English. In-service teacher training and development are occasionally provided by government and some other relevant institutions.

We now have had an overview of the ELT situation in Thailand. With respect to pronunciation, we can suggest here that if it is not treated properly during the many long years of English classes, Thai L2 learners of English may never be able to arrive at intelligible English pronunciation. Pronunciation needs to have a proper place in English class, but before going into that point in more detail, we have to investigate what sort of pronunciation syllabus would suit the Thai context. In the next part, from a review of pronunciation teaching methods, will see if there is anything that can be applied to the Thai ELT context.

4.3.2 Review of current pronunciation teaching methods

In this part I'm going to discuss what has been recommended by a range of experts in pronunciation teaching.

4.3.2.1 Recommendations in relation to pronunciation teaching

In Thailand as well as in many countries around the world, English is now introduced to younger learners. This is based on research – discussed in Chapter 2 – on L2 acquisition by young learners which reveals that they do better than their adult counterparts in second language acquisition, especially in phonology. It is suggested that pronunciation practice is actually the most immediate need for beginning learners and should be introduced at the beginning level of instruction (Pennington 1995: 220). I will therefore take this position as the basis of introducing pronunciation practice for young absolute beginning learners who are school children in rural areas of Thailand, whose opportunities for exposure to English outside the classroom are very rare. First let's see what has been recommended for such learners.

Two decades ago, it was suggested that activities in which learners would achieve target-like pronunciation should involve drill-type practice after the language items have been thoroughly explained to learners by their teacher. Even less than two decades ago Kenworthy (1987), for example, recommended that learners be explicitly introduced to the sound patterns to be practiced, after which practice through mechanical repetition should take place. This is similar to what Sharwood Smith (1993) suggests for L2 acquisition in general, i.e. that certain features of language input should become prominent through consciousness-raising by the teacher. The learner's consciousness is to be raised about the forms of the language that they are learning, so these forms will be taken in. The teacher prepares both the input, and enhancement of the input, which among other things may involve some explanation of language items to be learned. Drills are suggested to then extend to

communicative practice in order to serve the goal of helping learners use language in real life (Morley 1994, Celce-Murcia et al. 1996, Pennington 1996).

The steps of pronunciation practice leading to communicative use presented by Morley (1994), Celce-Murcia et al. (1996), and Pennington (1996) can be summarised as follows: Stage 1 controlled or dependent practice, where learners start language practice with activities like listening, reading, repeating of minimal pairs or key words either by themselves or in a sentence, short dialogues or a passage. This is followed by Stage 2, guided practice, where learners are engaged in activities in artificial communicative language use. At this level they might practice structure in communicative exercises like information gap activities or a role-play of a situation similar to one faced in real life. And, finally, Stage 3, in independent or communicative practice, learners get involved in less structured activities in relation to the use of language. This type of activity might include, for example, a discussion of a situation of the students' real-life situation, or giving a presentation on his/her own interest without preparation.

Dickerton (1994), however, believes that if learners know the actual rules of pronunciation, in other words, if they learn rules, they can apply them to their pronunciation. He claims that drilling doesn't seem necessary for this technique. The lesson depends on a kind of orthographic-based prediction for pronunciation work. But there is no direct example in his discussion of how a class can be conducted. One might assume that in this type of class a teacher may present, for example, orthographic-based stress rules to learners with a list of words (with different word formation). Learners would then learn the rules as well as distinguish the formation of

the words so when they later meet the new words with the same formation they can pronounce them correctly. But this process does not seem to agree with some basic assumptions about communicative teaching or the natural approach, for example it goes against Krashen's (1985) learning and acquisition distinction and questions whether learners can apply learned rules to their pronunciation.

Laroy (1995), on the other hand, introduced the idea that what is to be practised by learners should be indirectly introduced to learners in the same sort of relaxing atmosphere that is mentioned in the Thai national curriculum (see above), through games and with the help of music. The idea is based on the belief that when learners are in a relaxing atmosphere they can do well in pronunciation practice. Activities for language practice introduced in the book are suggested to be adaptable to all levels of learners. Cameron (2001), who deals directly with young learners, views the way in which language can be developed in terms of how learners actually use the language through a kind of task-based activity in class. Owing to the idea that children who start learning a foreign language very young encounter mainly the spoken language, dividing language into four skills of listening, speaking, reading and writing might not seem appropriate. Her book thus treats foreign language teaching holistically, where pronunciation teaching is not considered independently. The nearest thing to pronunciation practice might be where activities in learning the spoken language are introduced in class. An example of such an activity comes from how spoken language is taught through classroom discourse in an English class in Norway. Through this type of task, the teacher controls and leads the theme and direction of the verbal interaction in class, encouraging learners to respond to the topic of the discourse. The teacher might introduce some kind of topic to the class to build the background of the

class discourse. The teacher just leads the conversation and tries to persuade/support each learner to talk one at a time about a topic being discussed.

In terms of the teacher's role in a pronunciation class, his/her role seems to be central in most works discussed above. Most authors suggest that the teacher be the leader of the activities in class, though they can be either supporter or encourager to learners. The teacher can also be a motivator, a facilitator or an expert consultant (Pennington 1996). They can even take the role of diagnosing the learner's problems in pronunciation and then preparing tasks for them to cure the problems. Finally the teacher helps support each learner to set their individual goals for pronunciation and to help lead and support them to achieve that goal (Morley 1994, Celce-Murcia et al. 1996, Pennington 1996). However, whatever role a teacher may take, s/he seems to play an authority role being fully in charge of learning activities in class.

As for the learners, though it has been suggested that they are supposed to commit themselves to their goal of pronunciation (Pennington, 1996), their main role is to follow the class activities in order to achieve that goal.

What should the learner's goals in pronunciation actually be? As already mentioned, Kenworthy (1987) introduced the notion of 'intelligibility' as a goal for pronunciation practice. Most seem to agree that the learner's achievement should be based on the extent to which they achieve intelligibility or communicability. Thus the goal has shifted from the traditional one of perfect pronunciation, near-native pronunciation, or mastery of pronunciation (Morley, 1994) to intelligibility. Pennington (1996), however, suggests that though intelligibility has been accepted as a priority in

pronunciation, individual learners may later adopt the focus on 'fluency' and/or 'accuracy' depending on the situation and conditions where s/he requires use of language.

According to Kenworthy (1987:13), intelligibility is "being understood by a listener at a given time in a given situation. So it is the same as understandability". Although Kenworthy (1987) includes both the segmental errors and suprasegmental errors that lead to unintelligibility in English, what is considered to be a source of unintelligibility are the suprasegmental phenomena.

Sound substitutions:

This is exemplified when the initial consonant in 'thick' is substituted by [s]

e.g. when the sentence 'My friend is sick' is pronounced 'My friend is thick'.

Suprasemental errors:

1. Sound deletions

When the L2 learner leaves out a sound of the word is especially common consonant clusters in any position of the word, when one or two of the consonants in the clusters are deleted.

2. Sound insertions

An insertion of a sound can occur when non-native speakers add a sound when

they pronounce an English word like 'speak' as 'a-speak', (epenthesis)

3. Stress

If the learner does not stress one syllable more than another or stresses the wrong syllable, the listener will find it hard to identify the word.

It is not clear at which proficiency level or age the recommendations above are aimed, however it can be assumed that most recommendations are intended for learners who have already acquired some English, i.e., they might be intermediate learners who have had a good amount of input but are still making errors and having problems in pronunciation and they need some kind of remedial work on their errors – for example students in an English-speaking country.

It might now be clear that the answer to the question posed above regarding how to deal with young beginning learners could not easily be found in works by these authors. Though Cameron's (2001) book is aimed at teaching young learners, there was no direct discussion of how to teach pronunciation to be found in the book. It does not seem clear from the review of these works whether direct and explicit pronunciation classes are recommended. Where pronunciation practice is suggested, it is to be done implicitly in any class that involves speaking or listening activities (Pennington, 1996). It is also suggested that there be an equal portion in a spoken class where pronunciation practice can be engaged in through communicative activities (Morley, 1994). Pronunciation practice which can be done through activities prepared in a self-contained unit found in Laroy (1995) is also suggested to be integrated into a normal class and when an emphasis on pronunciation is required. This seems to leave the decision making for when and how to apply pronunciation practice in class to the teachers who will provide pronunciation input to learners.

As mentioned above, in places like rural Thailand input from the teacher will be the only input the primary school children get. Yet in relation to input for learners to practice their pronunciation, all experts assume that the teacher is an ideal model for pronunciation for the learners. That is, the teacher models the speech and learners repeat the word, with an emphasis on features such as word stress or rhyme (see e.g. Kenworthy 1987). With respect to stress practice, Laroy (1995) suggests that the teacher say words prepared for learners and in the later part of the activity, learners say these words. It has also been recommended that the teacher's basic knowledge of the sound system of English and the method of teaching pronunciation should be given special attention (Dalton Seidlhofer1994, Celce-Murcia et al. 1996). For non-native speakers of English, the teachers' pronunciation in English is questioned as to whether it provides an adequate model for their learners. There is, however, no further recommendation given to deal with this type of problem when it is encountered by the many non-native English speaking teachers worldwide. As this is the real case of Thai teachers who teach English in Thailand, there are no real solutions suggested.

Though the process in which a pronunciation lesson can be prepared is introduced by these authors (Celce-Murcia et al. 1996, Pennington 1996), some of them are likely to be too complicated for Thai primary school teachers to cope with.[8]

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[8] This assumption is also based on 25 years' experience as a secondary school English teacher, as well as the head of an English department and lecturer in a university. Thai teachers carry a heavy load of teaching, thus time for extra work for pronunciation class is quite limited. Teachers would prefer to use ready made teaching materials. Even though they are trained English teachers, they are not equipped to prepare their own teaching materials based on the recommendations in works written in English, and this would simply not be feasible for the majority of the teachers. Most materials Thai teachers are familiar with are in Thai.

So, after this discussion of the literature on pronunciation teaching, and a search for the right pronunciation practice for young Thai learners of English in Thailand, the answer to how to teach pronunciation to primary school children in a foreign language teaching situation has not been found. In the situation in Thailand where specific pronunciation practice is surely needed, a practical pronunciation syllabus for teachers, some suggestions on how to deal with the quality of input to learners, and, some recommendations on how to deal with young absolute beginners would be very helpful.

4.4 Input and language acquisition

The saying 'garbage in garbage out' would undoubtedly be a comment on how 'good quality' input is required by L2 learners in order to produce intelligible pronunciation. In this section, I am going to discuss how the input which L2 learners receive has an important effect on their second language learning. The discussion will include the idea of 'positive evidence with negative effect' (Young-Scholten, 1995). We will also refer to the situation where L2 learners receive 'inappropriate' and 'insufficient' input in a classroom language learning situation. The discussion will end with a comparison of how input is available in L1 learning environment and in L2 language learning in an EFL context.

4.4.1 Input in L1 and L2 acquisition

Input in L1 acquisition occurs in the form of utterances that the child receives from the surrounding language environment. But input might take different forms in L2 acquisition. In second language acquisition, learners often receive input in the form of examples of utterances of the target language through the process of language

teaching in the classroom. Input either in L1 or L2 acquisition can function as 'positive evidence' that helps learners make use of natural processes of language learning. However, in a second language situation, apart from positive evidence that helps support these natural processes, learners also receive considerable negative evidence which occurs in the form of corrective feedback, as well as explicit evidence that takes place in the form of explanation. This type of evidence typically occurs in the context of formal language instruction.

4.4.2 'Positive evidence with negative effect'

In the situation of a foreign language classroom, learners get involved with positive evidence in the form of utterances in a classroom environment. These utterances are those produced by teachers and classmates. As long as teachers and classmates are non-native speakers of target language, the aural input learners receive from teachers and their classmates may be strongly L1-accented. In this case, this type of input, which functions as positive evidence to help learners with language learning in the classroom, has a negative effect in that it causes the problems because it is in the form of accents that may be far from the standard of that in the L2 (Young-Scholten, 1995:110; see also Beebe, 1985). When this type of input represents a 'deviant' accent, i.e. one that is far from the target language standard accent, it is considered to be 'inappropriate' for the acquisition of a second phonology (Flege 1991; Young-Scholten 1995). Other than that, the sources of input in the typical language classroom situation are quite limited. If there are only two sources of input available in class: 1) aural input from teachers; and 2) aural input from classmates; this is considered by Young-Scholten (1995) to be 'insufficient' due to both teachers and especially learners having non-native accents.

Compared to an L1 acquisition situation or to an ESL situation, where learners receive plenty of input in the form of utterances in a natural language environment, L2 classroom learners in rural Thailand not only receive inappropriate input from teachers and classmates, their exposure to target language input outside the classroom is quite limited. They are normally in an environment where: 1) there are only a limited number of hours per week of second language instruction, 2) input from authentic materials on TV programmes or films is also limited by the fact that the majority of them are dubbed rather than sub-titled, 3) there is little use of English in daily life, and 4) there is a lack of native speakers, outside the classroom, too.

The problem of input will considerably affect any improvement in the acquisition of L2 phonology in Thailand. The case is undeniable in rural Thailand where availability of native-speaker input is next to nothing. The consequences of poor input have been shown by the Baseline study data which reveal that across levels of English, learners continue to have problems with aspects of pronunciation connected to intelligibility. This translates into the motivation for the main, experimental study: pronunciation improvement through addressing the problem of 'inappropriate' and 'insufficient' input.

4.5 Conclusion

What we have seen in this chapter is that the English language teaching curriculum for both primary and secondary school levels in Thailand has been designed to match the Communicative Approach. However, the Baseline study data suggest that the communicative objectives stated in the national English curriculum have not been

met, if this means that Thai speakers of English should be intelligible when they attempt to communicate. We have proposed in this chapter that problems are due to the way pronunciation has been treated in English classes in Thailand.

The consequences lead to the question of how this should be remedied and my answer is that a suitable English pronunciation syllabus is needed for Thai learners of English. The process of preparing such a syllabus led to the above review of recommendations. The answer, however, was not there. The section on input then provided an insight into how Thai learners of English have been fed 'inappropriate input' from their teachers. I have suggested that this is the reason why Thai learners' pronunciation of English has not improved. If this situation remains unaddressed, it is not likely that Thai learners of English will reach the level of 'comfortable intelligibility' and be able to communicate effectively in English.

Chapter 5

An experimental study of primary school learners

5.0 Introduction

The results found from the baseline study, as discussed in Chapter 3 inspired me to find a solution to help improve the pronunciation of Thai learners of English. My real concern was that what had been done in the classroom in relation to pronunciation practice in Thailand – as discussed in Chapter 4 - was not helping to improve the pronunciation of English among Thai learners, and the introduction of English at the primary level was not likely to bring about an improvement unless new methods of teaching pronunciation were developed. In this Chapter 5 I will discuss the research methodology relating to the main study and present the results of this study. I will first discuss the processes I followed in preparing the pronunciation teaching materials and how they were implemented in English classes in a rural area of Thailand. The chapter discusses the testing of two methods aimed to see whether the results suggest that young learners might be prevented from fossilising at a stage that is far from the English target. These two innovative methods involve ways of providing primary school children without any extra-classroom exposure to English with native English input in the classroom. The rest of the chapter is devoted to looking at the effect that these two different types of treatment had - in comparison with a control group - on two groups of Thai primary school children

5.1 Background

As discussed in Chapter 4, like many other countries around the world, including England, Thailand recently started foreign language teaching at the primary school level. Of course ministries of education might well realise that there is some sort of critical period for learning a second language, and they want to take advantage of this. But they forget that primary school teachers around the world are probably the least likely to be able to provide native second language input for their learners.

As pointed out several times already, the introduction of primary English is based on the idea of teaching young children a foreign language to exploit their still-active language acquisition mechanisms, but if these mechanisms do not get the right input, the opportunity will be lost. In countries where children have the opportunity to get input outside the classroom, from undubbed television to pop music in the target language, this may not matter as much. But as we have seen, particularly outside of Bangkok where the rest of the 53 million people in Thailand live, apart from well-known tourist areas on the southern coast and in Chiang Mai, no such opportunities exist.

The experimental study set out to see whether teaching methods that could be used by teachers with typical Thai accents in English and therefore with little ability to model pronunciation or effectively correct their pupils' non-target pronunciation would actually work. These methods involved bringing native English input into the classroom.

Based on the results from the baseline study confirming that Thai learners of English across primary, secondary and tertiary levels have persistent problems with English pronunciation, I developed pronunciation practice materials stemming from the discussion of the pronunciation teaching literature review discussed in Chapter 4. .

The first method or treatment (see Appendix A for full details) involved taped lessons based on raising learners' meta-phonological consciousness of phenomena such as syllable structure and stress. The input was enhanced through giving an explanation of or making salient certain key features to learners in Thai (Sharwood Smith 1993). The introduction of pronunciation practice to learners, however, was done through a more indirect process, and one in which learners were in a relaxing atmosphere (Leroy 1995).

The second method or treatment (see Appendix B) was designed which did not include any of the consciousness-raising techniques the first method used. This method just involved exposing the children to native speaker input on tape. To make sure the children paid attention to the input, it also required the children to respond through simple tasks to what they heard on the tape. For example, the children were told on the tape to colour a picture a certain colour. This method was based on the idea that young learners only need to hear native-speaker input, and that additional consciousness raising, i.e. metalinguistic processing, does not play an important role for learners below the age of puberty.

The inspiration for both methods comes from an experiment by Neufeld's (1987). If a similar process is carried out on young learners with the advantage of being within

the critical period, children ought to do better than adults (Lenneberg, 1972). Although in Neufeld's study, practice was given without involving meaning at all, in the lessons that were given to the young learners in the present study, meaning had to be involved because the lessons needed to be realistic, like a real language teaching situation. following the national curriculum.

It was the present study's main priority to prepare native-speaker input for L2 learners, so for the sets of lessons for both experimental groups, tape recordings were made of two British English speaking children roughly the same age as the learners: (Video-taped materials or computer-assisted materials were not developed because rural schools in Thailand do not have access to such equipment.) Voices of native speakers were chosen on the basis of the idea of 'quality input' (Young-Scholten, 1995). One of the children was a girl and the other was a boy. The reason for choosing these children was not only because of the intention to present native speaker input to Thai learners but also to make sure that a group of children would be motivated enough to listen to the tape. In other words, the idea of using voices of native speaking children whose age is relatively close to that of the young L2 learners in the study was expected to create interest by reducing the social distance between the native language presenters and the young Thai listeners.

In addition to the tapes, two techniques were added to address two potential problems. First, what if these school children did not respond to consciousness-raising exercises? As discussed in Chapter 4, the pronunciation books on the market are really aimed at post-puberty learners, and many researchers clearly feel that adult learners need consciousness-raising to 'take in' the input. But it could be that

consciousness-raising does not play the same role for children; it might confuse them, it might not hold their attention or they might simply ignore it. On the other hand, the second method, where the children just had to listen to the tape, might result in other problems if children do not children pay enough attention to the voices on tape. So for the second method, as noted above, the children had to not only listen to the tape and they also had to do various things, like colouring or ticking pictures designed to keep them listening.

5.2 Test subjects

Data were collected from three groups of young learners: an experimental group who got consciousness raising procedures (this group are referred to as the metalinguistic group, in the tables Meta lx), an experimental group who got pronunciation practice without raising of consciousness (this group is referred to as the primary linguistic data group, in the tables PLD), and a control group who only had their normal English lessons. The control group was in the nearest school to the two experimental groups. Ideally a real control group would have involved learners who were exactly the same status as those other two experimental groups, with none of the three groups having started English yet. But due to time constraints and the availability of classes in the schools to which the researcher had access and the co-operation of teachers, the control group had already started English the previous school term (first term). In fact, during the second term, when the study was carried out, most of the primary schools to which the researcher had access in that rural area of Thailand had already started to teach English the previous term. The two groups chosen as experimental groups had not yet started English because Thai schools have the flexibility to start English classes when they feel they are ready. A control group that had started

English the term before might lead to the question of comparability of data from this study. But we can view the control group as representative of a typical English class in Thailand, where tradition methods of language teaching are employed in classes, as discussed in Chapter 4 (and see Appendix C for further illustration). The control group was located in a small town nearest the more rural area where the two experimental groups were located. Ideally none of the three groups should be more advantaged than the others. But academically, perhaps because they were growing up in a town rather than a village, the control group was somewhat advantaged. They came from a school with slightly better standards including in English, according to evaluations carried out in 1992 and 1993 by the local Education Supervision Unit of that province. Table 5.1 and Table 5.2 show the academic background of the control group and experimental groups. This evaluation was carried out on students who were in the last year of primary school level who were evaluated on six different subjects: Thai, mathematics, science, health education, home economics, and English.

Table 5.1: Academic achievement by control vs. experimental groups in 1992

	THAI	MATHEMATICS	SCIENCE	HEALTH ED	HOME EC	ENGLISH
Control Group School (%)	81.93	69.37	80.38	87.60	91.95	84.36
S.D	5.86	12.40	5.91	3.59	4.12	8.20
Experimental Group School (%)	77.13	66.80	67.30	78.05	89.38	74.85
S.D	6.94	12.76	5.96	4.60	3.11	9.23

Source: A report on an evaluation on learners' achievement of primary schools in Kanchanaburi (1992: 79-80).

Table 5.2: Academic achievement by control group vs. experimental groups in 1993

	THAI	MATHEMATICS	SCIENCE	HEALTH ED	HOME EC	ENGLISH
Control Group School (%)	77.82	72.16	69.16	82.29	91.98	82.24
S.D	6.53	10.12	8.20	3.83	3.07	7.33
Experimental Group School (%)	74.50	53.31	67.30	83.23	88.38	80.31
S.D	6.41	10.05	6.01	3.72	2.77	7.24

Source: A report on an evaluation on learners' achievement of primary schools in Kanchanaburi (1993: 98-100).

As mentioned above, the control group had started their instruction in English the semester before, so they had had 40 hours by the time of the pre-test, which was carried out before the two experimental groups began their instruction (see below). The two experimental groups had not started their instruction in English. As noted above, this selection of pupils could not be avoided in the rural area of Thailand where the study was done, but in comparing these groups, we can see what the influence of typical English instruction (the control group) was on the development of syllable structure and stress in English. A slight educational advantage and an additional term of English means the control might be expected to do better than the experimental groups. Therefore, if the results of the study show the control is not better, this will be more convincing.

Table 5.3 shows the background of the children in the study. The age differences in the last column are due to the fact that some children were held back in the same class and some were late to start school.

Table 5.3: Subjects

Group	Sex		Age Range
	Male	Female	
Control Group n = 30	16	14	6.11 – 8.5
Meta Ix Group n = 23	13	10	6.9 – 11.1
PLD Group n = 27	16	11	7.5 - 8.10

5.3 Procedure

The two treatments were carried out at the same time in the second school semester of 2001, and the lessons were given by the researcher as the pupils' only English lessons. The lessons for both groups lasted 20 minutes a day, five days a week for the last four weeks of that term (English lessons were not planned to start earlier and did not). This resulted in a total of 6 hours and 40 minutes of input. To give all the students in the study contact with me, I also taught the control group class, who were continuing with English with their Thai teacher. I spent three to five minutes every day for four weeks informally talking to the students in Thai about what they had learned in their earlier English lesson. If new English words had been taught I asked them to pronounce those words, but there was no correction made by me when errors were produced by learners. This was the same procedure I followed with the two experimental groups. All three classes used the same set of vocabulary, as dictated by the Thai national curriculum for the first term of English at the primary Preparatory Level (for the curriculum, see Appendix D).

The metalinguistic group's tasks involved consciousness raising exercises that the children had to complete while listening to the two English children's voices on a prepared tape. The lessons also included repeating the words. Learners were, however, not required to immediately pronounce the words unless the features or form of the language item had been discussed; in this way the production was delayed until the learners were well-informed about the forms being learned, following Neufeld (1987). The children in this group were told by me in Thai before listening to the tape what they were going to listen to and they were asked to listen carefully. Still in Thai, the whole class then helped identify in discussions with me the

characteristics of the language item they had just heard. For example, together we tried to identify which syllable got the stress. Pictures of what they heard on the tape were also introduced to motivate them (written words could not be used as they had not yet learned the alphabet). Then they practiced pronouncing words based on pictures of these words, in groups and later individually. However, there was no Thai translation given for these English words and I did not model any pronunciations in English to learners. When errors were made, I ignored them.

The group referred to as the primary linguistic data group only listened to and responded to what they heard from the same two English children, but on a different set of tape recordings made for this method: The teacher (me) played the recorded material along with pictures of the language items introduced on the tape. This time, practice involved the pupils responding to simple commands by the children on the tape. For example, the tape said 'tick banana' and the learners then ticked the picture of a banana, or the tape said 'say "hello"' and the children then said "hello". When the children didn't understand verbs such as 'tick' and 'say' the first time they heard them I translated them into Thai. As with the first group, I did not correct learners' pronunciation or model pronunciation in any way, for example by repeating what was said on the tape.

The real pictures of the native speaking children whose voices were heard on the tape were also presented during the lessons for both groups. This is how the voices from native speakers, whose ages were relatively the same as the L2 learners, along with their pictures, were intended to hold the children's attention. Pronunciation practice

was designed to be presented through interaction between the children on the tape and the learners as a kind of meaningful practice, not just as listen and repeat drills. The idea was intended to reduce the distance of communication between listening to the tape and responding. The atmosphere I tried to create was one where L2 learners of English in Thailand were interacting with their new English friends.

5. 4 Testing

Two types of production test and were administered to learners: a repeat-after-tape production test and picture-naming test. Like the treatment, the tests involved the words in the national curriculum that the children were learning. Because the children had not learned to read, it would have been difficult to test children on words they had not yet learned to see whether their pronunciation of words would extend beyond what they had learned in the classroom.

The repeat-after-tape production test required children to repeat individual words after they heard these spoken on tape (this time by a female adult British English speaker who was a linguistics PhD student at the time). Each learner was asked to repeat each word they heard from the recording. The picture-naming test involved giving the word for pictures learners saw, but only the control group was able to take this test, for obvious reasons. The tests were administered individually and each pupil was tape-recorded.

These tests were administered to all three groups of learners at three points in time:

1) Pre-test: before the lessons were given,

2) Post-test 1: immediately after the pronunciation lessons finished, i.e. four weeks after the Pre-test

3) Post-test 2: four weeks after Post-test 1, four weeks after the lessons had finished.

Children were all on vacation between Post-test 1 and Post-test 2 during which time no English classes occurred for any group.

Experimental studies in SLA have often been carried out without much attention to the employment of second or delayed post-test in their data collecting, with studies sometimes using data collection from one post-test. An early experimental study that paid careful attention to use of a delayed post-test is that of White (1991), who studied the acquisition of English adverb placement by French L2 learners. The study compared two types of classroom language instruction, one of which focused on the use of negative evidence while the other focused on primary linguistic data as input. Learners aged 11-12 years old were put into two groups of 82 and 56. The procedure began with a pre-test after which two weeks of instruction followed. Post-test 1 was administered after the end of instruction and post-test 2 five weeks later. White also administered another post-test one year after post-test 2.

White does not provide clear guidelines as to how long the second post-test should be delayed after post-test 1 is administered, and in my case, I was limited by time constraints for the delayed test. For example, the instruction for learners in my study

was complete at the end of the second term. Right after post-test 1 learners took a four-week break. Post-test 2 was administered as soon as learners returned from the term break to prevent their acquisition from being influenced by new input (which would have complicated my study) from their Thai-speaking teachers in their new English classes once the new term started.

All the data were collected in the three tests were tape-recorded by a Sony Walkman professional WM – D6C with a Sony ECM-MS907 microphone and subsequently transcribed by the researcher and then checked for accuracy by another linguistics PhD student who was a native English speaker. There was 90% agreement.

5.5 Research questions and hypotheses

From the discussion in Chapter 2, we know that we can predict success for children exposed to an L2 in the target language country during their critical period. When children are exposed to the L2 in the classroom, success seems to be less likely, particularly in rural Thailand, as already discussed. Thai learners of English living in the USA still had not acquired English supra-segmental phonology. Akita (2001) studied this directly and she found that the English stress and syllable structure of Japanese speakers of English in the target language country did not always change when they received native English input. The research question that we started with was how Thai learners English phonology can be improved. I narrowed this question down to whether Thai children can acquire English phonology in response to input from native speakers. This question seems simple, but providing native speaker input to primary school children is not easy in rural Thailand. There could be several solutions. Thailand could employ native-speaking teaching assistants. But Thailand

cannot afford this. Teachers' English could be improved. But the research discussed in Chapter 2 and the Baseline Study results discussed in Chapter 3 show that even the English majors who finally got some native speaker input at university were still not very close to native. English majors are not the students who become primary school teachers. The solution in 5.3 under 'Procedure' is the one I decided to try: classroom materials which were designed to provide young learners with native speaker input. These materials needed to be ready-prepared materials so Thai teachers would not have to prepare anything or speak like native English speakers. It was important to test materials that Thai teachers will use if they are successful.

The research question was a simple one: Can young Thai L2 learners acquire syllable structure and stress in English from native speaker input provided by taped materials? The null hypothesis is that there will be no difference between control group and the experimental groups on post-test 1 and post-test 2. In other words, the treatment will have no effect.

5.6 Results

A note should be made here that the amount of data produced by learners differs in the repeat-after-tape from that of picture-naming test. In the repeat-after-tape task learners were able to produce what they heard, but in the picture-naming task learners could only produce the words they knew, and not all the children had learned all words.

I will now discuss the results of each test. Owing to the fact that there are two phenomena tested in the study, namely syllable structure and stress patterns, the

discussion will be first of the results in relation to syllable structure and will then move to the results for stress.

5.6.1 Syllable structure: Repeat after tape test

The first table in each set below shows the number of items actually produced by each group, with the frequency of correct or target production also shown. Learners sometimes did not respond at all to prompts, and the frequencies given in the first table in each set exclude lack of attempt. The number of prompts learners heard in each group will be given in the text where each set of tables/figures is discussed.

Table 5.4.1 and the chart in Figure 5.1 show learners' frequency of production of target initial clusters in English, collected through use of the 'repeat after tape' test for which learners had to repeat into a microphone each word they heard from on the tape. There were 12 words with initial clusters on the tape. These were:

/pl-/ = plane [ple:n], plate [ple:t]
/bl-/ = black [blæk], blue [blu:]
/fl-/ = fly [flɑɪ], flag [flæg]
/fr-/ = Friday ['frɑɪde]
/kl-/ = clock [klɔk]
/kr-/ = ice-cream ['ɑɪskri:m]
/gl-/ = glass [glɑ:s]
/gr-/ = green [gri:n]
/θr-/ = three [θri:].

As we see in Table 5.4.1, out of the 360, 276 and 324 prompts the control group, metalinguistic group and primary linguistic data group learners heard on the tape, they actually produced the number of tokens shown in the column under 'No. of items'. The number of target responses along with the frequencies is given in the TARGET column. Figure 5.1. then gives an overall view of learners' performance by group, where the histogram graphically presents a comparison of the frequencies of

the target responses produced by learners from the three groups, showing results from all three testing points, that is, pre-test, post-test 1 and post-test 2. All tables and figures in this chapter will follow this format.

Table 5.4.1: Clusters in Initial Position: Repeat after Tape

Subject Group	Pre-test		Post-test 1		Post-test 2	
	No of items	TARGET Total target frequency	No of items	TARGET Total target and frequency	No of items	TARGET Total target and frequency
Control (n=30)	**354**	**49** 13.84%	**356**	**61** 17.13%	**356**	**67** 18.82%
Meta lx (n=23)	**261**	**55** 21.07%	**273**	**96** 35.16%	**275**	**106** 38.55%
PLD (n=27)	**292**	**18** 6.16%	**324**	**102** 31.48%	**324**	**123** 37.96%

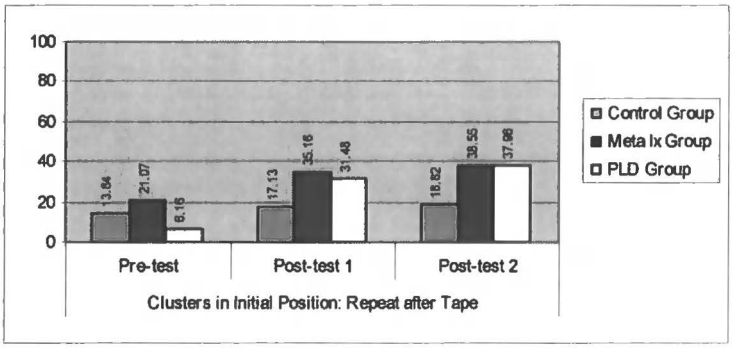

Figure 5.1 Clusters in Initial Position: Repeat after Tape

The results show different behaviours for the three groups. For the pre-test, learners from the metalinguistic (Meta-lx) group, i.e. those who received treatment involving consciousness-raising (see Ch. 4), tended to exhibit the best performance, followed by the control group, the group in which language was learned through traditional teaching methods. The primary linguistic data (PLD) group, where the learners only heard input from native speakers, produced the least correct number of initial onsets in words. But remember that neither the Meta-lx group nor the PLD group had received any English instruction when the pre-test was carried out. This is therefore not a surprising result. Post-test 1, when the test was administered after the treatment

ended, reveals that the Meta-lx group and the PLD group outperformed the control group. The pattern of language production from each group looks similar for that of post-test 1 and post-test 2 when the test was administered four weeks after language teaching had finished.

As shown below in Table 5.4.2, rather than using the frequency, the median was instead used to calculate the p values presented in when comparing groups. This allows us to take into account the behaviour of individuals, including when they did not make an attempt to produce anything. When interpreted statistically through the Mann-Whitney U Test (used here and throughout), it is found that significant differences (at p-value<.05) between control group and Meta-lx exist for post-test 1 and post-test 2, but not for the pre-test. Differences between control group and PLD group were significant in all tests for the pre-test, post-test 1 and post-test 2. As for the Meta-lx group and the PLD group, a significant difference was found between them only for the pre-test but not between the two groups for post –test 1 and post-test 2.

Table 5.4.2: Clusters in Initial Position: Repeat after Tape

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control vs. Meta lx	8.3300 18.1800	-2.153*, (.031)	8.3300 25.0000	-2.560*, (.010)	12.5000 41.6700	-2.63*, (.009)
Control Vs. PLD	8.3300 .0000	-1.928, (054)	8.3300 33.3300	-3.130*, (002)	12.5000 33.3300	-3.392*, (.001)
Meta lx Vs. PLD	18.180 .0000	-3.744*, (.000)	25.000 33.3300	-.275, (784)	41.6700 33.3300	-.118, (.906)

*Significant value at .05

Now we'll look at the learners' production of final /l/ sound in English.

Table 5.5.1, Figure 5.2 and Table 5.5.2 show that out of the 120, 92 and 108 prompts for the control group, meta lx group and PLD group respectively, each group produced the varying amounts shown under 'No. of items'. This set of words includes four words with final /l/on the repeat-after-tape test including words like:

apple ['æppl], doll [dɔl], ball [bɔl], and pencil ['pensl].

Table 5.5.1: Final /l/: Repeat after Tape

Subject Group	Pre-test		Post-test 1		Post-test 2	
	No of items	TARGET Total target frequency	No of items	TARGET Total target frequency	No of items	TARGET Total target frequency
Control (n=30)	**119**	**0** 0.00%	**119**	**0** 0.00%	**120**	**0** 0.00%
Meta lx (n=23)	**67**	**23** 34.33%	**69**	**9** 13.04%	**69**	**28** 40.58%
PLD (n=27)	**79**	**1** 1.27%	**81**	**22** 21.67%	**81**	**27** 33.33%

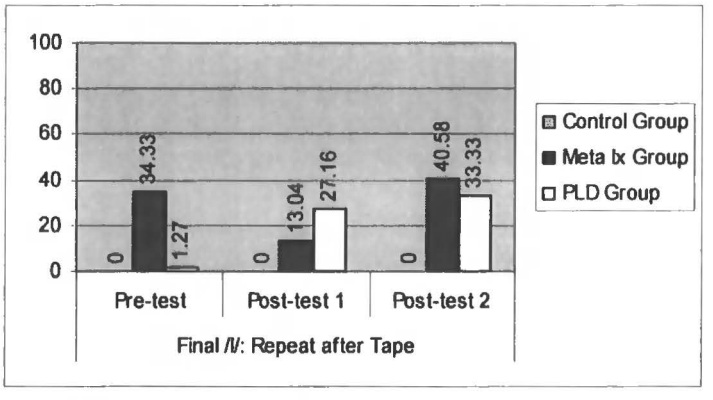

Figure 5.2: Final /l/: Repeat after Tape

The Meta-lx group performed the best among all three groups on the pre-test. The PLD group did not do well, whereas the control group could not manage to produce target-like final /l/ words at all, not only in pre-test but on all three tests. In post-test 1, it is notable that the Meta-lx group's performance declined compared to their better

performance on the pre-test. The PLD group did better than the other two groups in this test. As for the performance on post-test 2, the Meta-lx group improved compared to the PLD group and the control group, who found it impossible to pronounce English words with final /l/. It is also interesting to see that the performance of both groups, the Meta-lx group and the PLD group, is higher on post-test 2 than on post-test 1. When statistics were employed, as shown in Table 5.5.2., it was found that the performance between the control group and the PLD group was not significantly different on the pre-test. In addition, performance when comparing the Meta-lx group and the PLD group was found to be significantly different in post-test 1 but not in post-test 2.

Table 5.5.2: Final /l/: Repeat after Tape

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control vs. Meta lx	.0000 33.3300	-6.038*, (.000)	.0000 .0000	-3.467*, (.001)	.0000 33.3300	-6.741*, (.000)
Control vs. PLD	.0000 .0000	-1.054, (.292)	.0000 33.3300	-4.866*, (.000)	33.3300 33.3300	-6.125*, (.000)
Meta lx vs. PLD	33.3300 .0000	-5.537*, (.000)	.0000 33.3300	-1.980*, (.048)	33.3300 33.3300	-1.219, (223)

* Significant value at .05

The next set of results we will look at are for final stops. Table 5.6.1 again shows different groups performed differently in terms of frequency on the tests. The number of prompts was 390, 299 and 351 for the control group, Meta lx group and PLD group respectively. This set of 13 words that were included on the test are /-t/ as in cat [kæt], eight [e:t], and plate [ple:t]; /-d/ as in bird [gɜ:d], head [hɛd], and red [rɛd]; /-k/ as in black [blæk], clock [klɔk]; and /-g/ as in dog [dɔg], egg [ɛg], flag [flæg], leg [lɛg], pig [pɪg].

Table 5.6.1: Final Stops: Repeat after Tape

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**387**	**6** 1.55%	**388**	**8** 2.06%	**390**	**3** 0.77%
Meta lx Group (n = 23)	**287**	**6** 2.09%	**298**	**27** 9.06%	**299**	**29** 9.70%
PLD Group (n = 27)	**334**	**0** 0.00%	**351**	**30** 8.55%	**350**	**30** 8.57%

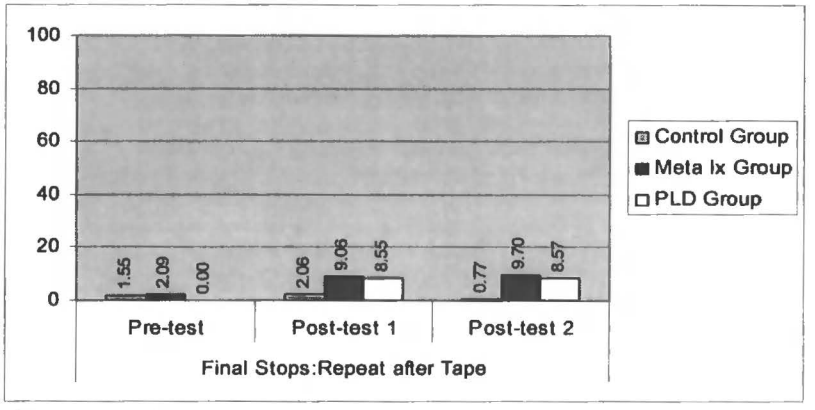

Figure 5.3: Final Stops: Repeat after Tape

Table 5.6.1 and Figure 5.3 show that the control group and the Meta-lx group are the two groups that could manage to produce some target like words on the pre-test whereas the PLD group could not. However the performance from both groups seems very low. There is a considerable improvement in post-test 2 for the Meta-lx group and the PLD group but not for the control group, who made minor improvements from the pre-test. The pattern of post-test 2 looks rather similar to that of post-test 1, but with a slightly better production achieved by the Meta-lx group and the PLD group. The control group, on the other hand, produced some slightly less native-like words than that in post-test 2. The overall production of English words ending with stops through repeat after tape among all groups looks remarkably low.

A significant difference, as shown in Table 5.6.2, was found in post-test 1 and post-test 2 between the control group and the other two groups. Between the Meta-lx group and the PLD group, it seems that the Meta-lx group was able to do slightly better than PLD group in both post-test 1 and post-test 2 but these differences are not statistically significant.

Table 5.6.2: Final Stops: Repeat after Tape

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000 .0000	-.221, (.825)	.0000 .0769	-3.044*, (.002)	.0000 .0769	-4.092*, (.000)
Control PLD	.0000 .0000	-2.435*, (.015)	.0000 .0769	-2.753*, (.006)	.0000 .0000	-2.942*, (.003)
Meta lx PLD	.0000 .0000	-2.798, *(.005)	.0769 .0769	-.326, (.744)	.0769 .0000	-1.127, (.260)

* Significant value at .05

Now we turn to the testing of final fricatives, as in the test of four words ending in /s/ as in glass [glɑ:s], /z/ as in nose [noz], /-ʃ/ as in fish [fɪʃ], and /-v/ as in give [gɪv]. Results of the repeat-after-tape test are shown in the table and figure below. Table 5.7.1 shows that from the number of 120, 92 and 108 prompts for control group, Meta lx group and PLD group respectively, the three groups differed in their production.

Table 5.7.1: Final Fricatives: Repeat after Tape

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**117**	**10** 8.55%	**119**	**7** 5.88%	**119**	**11** 9.24%
Meta lx Group (n = 23)	**85**	**9** 10.59%	**90**	**18** 20.00%	**91**	**27** 29.67%
PLD Group (n = 27)	**94**	**2** 2.13%	**106**	**27** 25.47%	**108**	**19** 17.59%

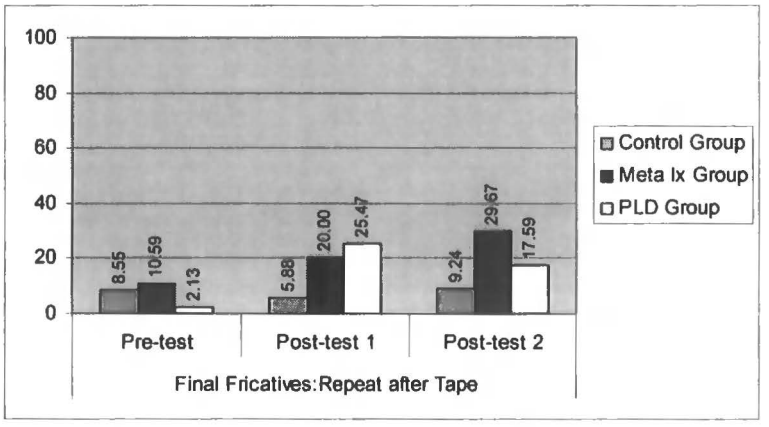

Figure 5.4: Final Fricatives: Repeat after Tape

We can immediately see from Table 5.7.1 that the figures for target-like production are much higher than for the final stops. These are not as high as for initial clusters. Note other researchers have also found that the initial position is easier than the final position; see review in Archibald and Young-Scholten (2000). As shown in the table and on the bar chart, the Meta-lx group seems to perform slightly better than control group, on the pre-test, whereas the PLD group produced the least correct English words ending in fricatives. In post-test 1, the PLD group performed the best followed by the Meta-lx group and the control group was the lowest. For the fricatives in this test, both Meta-lx group and PLD group did much better than on the pre-test. The control group, on the other hand, exhibited a small drop in their performance as compared with the pre-test. In post-test 2, the Meta-lx group outdid the other two groups, the PLD came second and the control group produced final fricatives in English words the least often. Compared with other two tests, the Meta-lx group did the best in post-test 2, whereas PLD group did best on post-test 1. The control group's performance looks quite similar in their post-test and pre-test, with a slight dip for post-test 1.

Through the statistics interpretation as shown in Table 5.7.2, significant differences (at p-value=.002) were found between the control group and Meta-lx group in post-test 1 and (at p-value<.001) in post-test 2, but not in the pre-test. Between the control group and the PLD group, significant differences (at p-value=.029) in post-test, (at p-value=.000) in post-test 1 and at .040 in post-test 2. Significant differences were found for the Meta-lx group and the PLD group in the pre-test (at p-value=.007) and the post-test 2 (at p-value=.042) but not in post-test 1.

Table 5.7.2: Final Fricatives: Repeat after Tape

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000 .0000	-.657, (.511)	.0000 25.0000	-3.125*, (002)	.0000 25.0000	-3.316*, (001)
Control PLD	.0000 .0000	-2.178*, (.029)	.0000 25.0000	-4.410*, (.000)	.0000 25.0000	-2.052*, (040)
Meta lx PLD	.0000 .0000	-2.713*, (007)	25.0000 25.0000	-1.244, (.213)	25.0000 25.0000	-2.034, (.042)

* Significant value at .05

The only part of the test that involved more than just consonants looked at the final consonants /n/, /v/, /t/ after the diphthong /ai/ and involved four words as in nine [naɪn], five [faɪv], white [waɪt], and in rice [raɪs]. Although these consonants are generally allowed finally in Thai they are not allowed after the diphthong /aɪ/, as discussed in Chapter 2. For Table 5.8.1, there are varying amounts of prompts for each group: 120, 92 and 108 for control group, Meta lx group and PLD group, respectively, and this resulted in varying amounts of items produced.

Table 5.8.1: Final /n/,/s/,/t/,/v/ after /ai-/: Repeat after Tape

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**118**	**4** 3.39%	**116**	**4** 3.45%	**120**	**3** 2.50%
Meta lx Group (n = 23)	**91**	**8** 8.79%	**92**	**13** 14.13%	**92**	**15** 16.30%
PLD Group (n = 27)	**105**	**3** 2.86%	**108**	**17** 15.74%	**108**	**21** 19.44%

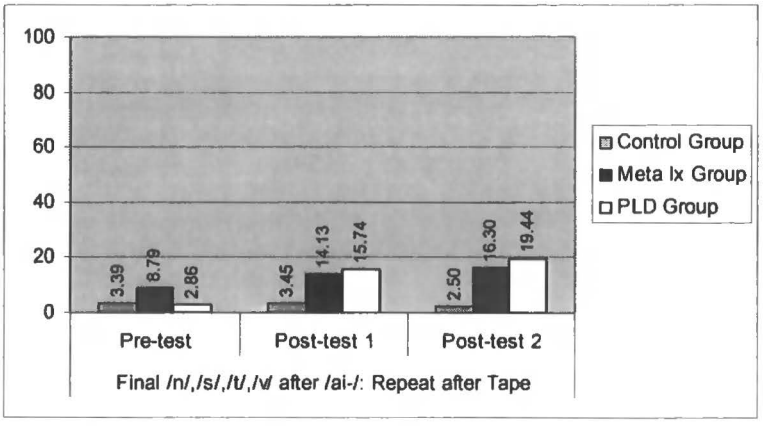

Figure 5.5: Final /n/,/s/,/t/,/v/ after /ai-/: Repeat after Tape

As we have seen in every table and chart so far, the Metalinguistic group performed a little better than the other two groups in the pre-test, and the control group did a little better than the PLD group. Both experimental groups did better than the control group after their treatment. What is more important for this entire discussion of the results is the control group's and the two experimental groups' improvement between the pre-test and the post-tests. On post-test 2, both experimental groups improved their performance from post-test 1.

The PLD group appears to be slightly better than the Meta-lx group in both post-test 1 and post-test 2, but the two groups are not significantly different, as shown in Table 5.8.2. As for post-test 2, the Meta-lx group and the PLD group improved from post-test 1, while control group performed slightly worse than on post-test 1. In this test, though the PLD group looked better than the Meta-lx group, the difference was not significant.

Table 5.8.2: Final /n/, /s/, /t/, /v/ after /ai-/: Repeat after Tape

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000 .0000	-2.178*, (.029)	.0000 25.0000	-3.125*, (002)	.0000 25.0000	-2.63*, (.009)
Control PLD	.0000 .0000	-.657, (.511)	.0000 25.0000	-4.410*, (.000)	.0000 25.0000	-3.392*, (.001)
Meta lx PLD	.0000 .0000	-2.713*, (007)	25.0000 25.0000	-1.244, (.213)	25.0000 25.0000	-.118, (.906)

* Significant value at .05

The final set of words we will look at the results for from the repeat-after-tape test are 10 words with final consonant clusters. The words tested involved the clusters /-nd/ in hand [hænd], /-ndʒ/ in orange ['ɒrɪndʒ], /-nk/ in pink [pɪŋk], /-mp/ in lamp [læmp], /-lt/ in belt [bɛlt], /-lk/ in milk [mɪlk], /-ks/ in box [bɔks], ox [ɔks], six [sɪks], and /-sk/ in desk [dɛsk]. As shown in Table 5.9.1, out of the 300, 230 and 324 prompts for control group, Meta lx group and PLD group, learners from each group again produced the numbers of items shown, for each test.

Table 5.9.1: Final Clusters: Repeat after Tape

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**295**	**5** 1.69%	**296**	**4** 1.35%	**299**	**10** 3.34%
Meta lx Group (n = 23)	**217**	**22** 10.14%	**230**	**45** 19.57%	**229**	**72** 31.44%
PLD Group (n = 27)	**251**	**5** 1.99%	**267**	**62** 23.22%	**266**	**65** 24.44%

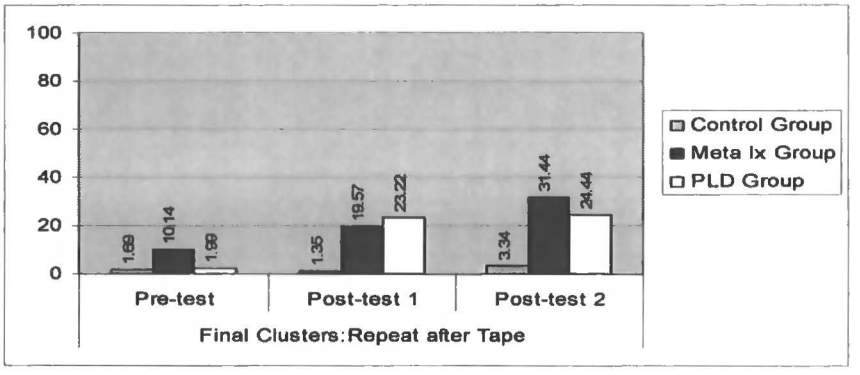

Figure 5.6 Final Clusters: Repeat after Tape

Table 5.9.1, Figure 5.6 and Table 5.9.2 show that once again that the Meta-lx group performed better than the other two groups on the pre-test (at p-value=.008 significance) for the control group and (at p-value=.018 significance) for the PLD group, but all produced low numbers of final consonant clusters on the test words. Both experimental groups improved their performance on post-test 1 and post-test 2, but the control group did not do so. The PLD group's performance was slightly better than the Meta-lx group's on post-test 1, and slightly worse on post-test 2, but neither difference was significant, as shown in Table 5.9.2.

Table 5.9.2: Final Clusters: Repeat after Tape

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000 .0000	-2.667*, (008)	.0000 10.000	-4.933*, (.000)	.0000 30.000	-5.041*, (.000)
Control PLD	.0000 .0000	-.253, (.800)	.0000 10.000	-5.085*, (.000)	.0000 20.000	-4.287*, (.000)
Meta lx PLD	.0000 .0000	-2.365, *(.018)	10.000 10.000	-.459, (.646)	30.000 20.000	-1.333, (182)

* Significant value at .05

5. 6. 2 Syllable structure: Picture naming task

We will now move on to the results of the picture naming test. This was the task in which learners were asked to pronounce English words from picture stimulus. Unlike the repeat-after-tape test, where learners' performance was in part based on their

ability to imitate the English words they heard on the tape, the picture naming test allows us to see how the learners stored representations of words in their beginning English lexicon. It seems likely that this test is a more accurate demonstration of their phonological competence than the repetition test. There were several drawbacks with the picture naming test. First, the number of items of English words produced through picture naming test was considerably lower than that of repeat-after-tape test. Second, only those words which could be shown as pictures could be tested. And third, the learners from the two experimental groups – the Meta-lx group and the PLD group – did not produce anything at all on the pre-test because they did not yet know any words due to the fact that they were introduced to English after the pre-test. This is in contrast to the control group learners, who were able to name at least some pictures on the pre-test because they had started to learn English the previous term. This means that we can only compare the control group on the pre- and post-test, and then the control group with the experimental groups on the two post-tests. We can also compare learners' production on the repeat-after-tape test and the picture test.

We will consider the target sounds in the same order as they were considered for the repeat-after-tape test. We first look at the test of English words beginning with clusters, words produced through this picture naming test include 10 words beginning with the following clusters: /bl-/as in black [blæk], blue [blu:], /fl-/ as in fly [flaɪ], flag[flæg], /fr-/ as in Friday['fraɪdɪ], /kl-/as in clock [klɔk], /kr-/as in ice-cream ['aɪskri:m], /gl-/ as in glass [gla:s], /gr-/ as in green [gri:n], and /θr-/as in three [θri:]. As mentioned above, not every learner produced all the words for which they were shown pictures because learners did not produce what they had not learned. The

varying numbers of prompts, i.e. 300, 230 and 270 for the control group, Meta lx group and MLD group, resulted in the varying number of tokens or items in this task on the different tests, as shown in Table 5.10.1

Table 5.10.1: Clusters in Initial Position: Picture Naming

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	TARGET (%)	No of items	TARGET (%)	No of items	TARGET (%)
Control (n=30)	97	0 0.00%	151	0 0.00%	177	2 1.12%
Meta lx Group (n = 23)	-	-	101	33 32.67%	102	28 27.65%
PLD Group (n = 27)	-	-	104	21 20.19%	105	21 20.00%

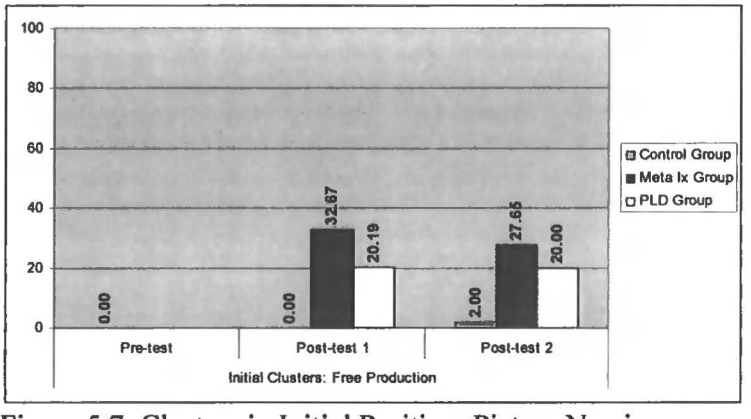

Figure 5.7: Clusters in Initial Position: Picture Naming

The Table 5.10.1 and the chart in 5.7 show that the control group did not produce any correct pronunciations of English words beginning with clusters. The pattern of language performance by all groups as shown in post-test 1 looks similar to that in post-test 2. In both tests, the Meta-lx group performs better than the PLD group while control group's performance is more or less unchanged from the pre-test.

As shown in Table 5.10.2, it is interesting to see that through statistical interpretation, the differences between the control group and other two groups both post-tests are

significant, and for post-test 1 differences are significant (at p-value=.031) between the Meta-lx and PLD groups but this significance disappears in post –test 2. With respect to the blank cells in Table 5.10.2, there were not enough tokens to perform the Mann-Whitney Test for PRE_TEST *GROUP (2, 3).

Table 5.10.2: Clusters in Initial Position: Picture Naming

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000	-	.0000 20.0000	-5.084*, (.000)	.0000 25.0000	-4.853*, (.000)
Control PLD	.0000	-	.0000 14.2900	-4.445*, (.000)	.0000 .0000	-3.937*, (.000)
Meta lx PLD	-	-	20.0000 14.2900	-1.451, (.147)	25.0000 .0000	-1.349, (.177)

* Significant value at .05

With respect to final /l/, the four test words depicted were apple['æppl], doll[dɔl], ball[bɔl], and pencil['pensl]. Table 5.11.1 shows the number of tokens actually produced for the 120, 92 and 108 prompts given for the control group, Meta lx group and PLD group respectively.

Table 5.11.1: Final /l/: Picture Naming

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**51**	**0** 0.00%	**87**	**0** 0.00%	**87**	**0** 0.00%
Meta lx Group (n = 23)	-	-	**69**	**34** 49.27%	**76**	**36** 47.37%
PLD Group (n = 27)	-	-	**71**	**38** 53.52%	**80**	**39** 48.75%

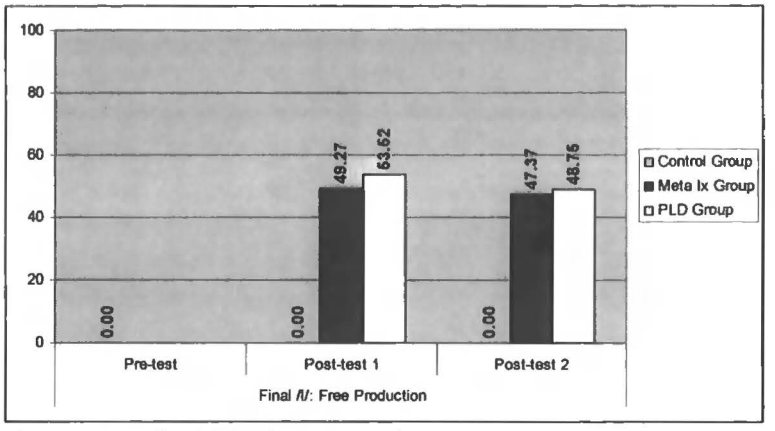

Figure 5.8: Final /l/: Picture naming

Table 5.11.1 and Figure 5.8 show that the control group did not manage to produce correct English words ending with /l/ at any of the three testing points. However, the Meta-lx group and PLD group show similar, very high patterns of target-like performance in post-test 1 and post-test 2.

As shown in Table 5.11.2, when compared with the control group on both post-tests, these differences were significant (at p-value=.000). Although the PLD group performed somewhat better than the Meta lx group at both testing points, these differences were not significant. Because there were too few valid cases to perform the Mann-Whitney Test for the pre-test for the groups shown, the cells in the table show no statistics.

Table 5.11.2: Final /l/: Picture Naming

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000	-	.0000 50.0000	-6.349*, (.000)	.0000 50.0000	-6.197*, (.000)
Control PLD	.0000	-	.0000 50.0000	-6.262*, (.000)	.0000 50.0000	-6.032*, (.000)
Meta lx PLD	-	-	50.0000 50.0000	-1.114, (.265)	50.0000 50.0000	-.050, (.960)

* Significant value at .05

In relation to the production of English final stop sounds, we now look at the picture naming task involving 13 English words ending with stops which included the following words: /-t/ as in *cat, eight, plate,* /-d/ as in *bird, head, red,* /-k/ as in *black, clock,* and /-g/ as in *dog, egg, flag, leg, pig.* Table 5.12.1 shows the number of tokens actually produced by learners in each group in different tests for 390, 299 and 357 prompts for the control group, Meta lx group and PLD group, respectively.

Table 5.12.1: Final Stops: Picture Naming

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**216**	**0** 0.00%	**281**	**0** 0.00%	**301**	**0** 0.00%
Meta lx Group (n = 23)	-	-	**131**	**33** 25.20%	**116**	**26** 22.41%
PLD Group (n = 27)	-	-	**159**	**28** 17.61%	**157**	**26** 16.56%

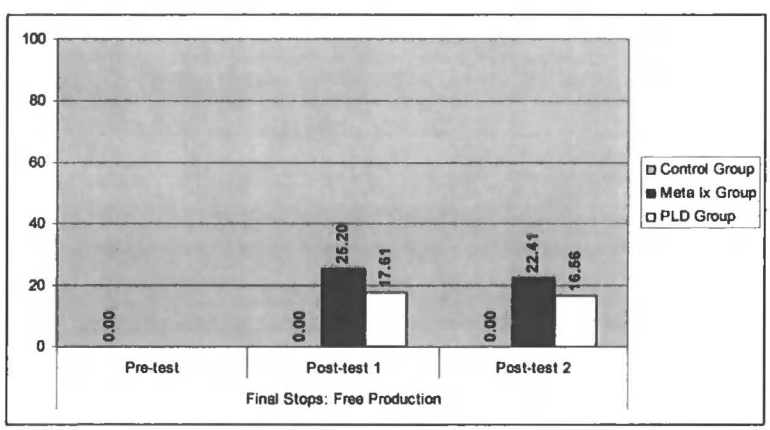

Figure 5.9: Final Stops: Picture naming

Table 5.12.1 and Figure 5.9 show that the control group produced incorrect English words ending with stops. Post-test 1 and post-test 2 reveal a pattern of language performance like we saw for the initial clusters and for the final /l/ among all three groups: the Meta-lx group did better than the PLD group and the control group was unable to correctly pronounce any English words ending with stops. The percentages

for correct words produced by the two experimental groups is similar in both post-test 1 and post-test 2.

Again, from Table 5.12.2, statistical interpretation indicates that significant differences (at p-value=.000) were found between the control group and the two experimental groups and that the differences between the Meta-lx group and the PLD group were not significant on either post-test 1 or post-test 2. (Due to the low number of valid cases to perform the Mann-Whitney Test on all figures, cells are blank where no statistics could be computed.)

Table 5.12.2: Final Stops: Picture Naming

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000	-	.0000 .2857	-5.964*, (.000)	.0000 .2000	-5.528*, (.000)
Control PLD	.0000	-	.0000 .2000	-5.235*, (.000)	.0000 .0000	-4.242*, (.000)
Meta lx PLD	-	-	.2857 .2000	-1.194, (.194)	.2000 .0000	-1.260, (208)

* Significant value at .05

The next set of results is for English words that end with fricatives. There are four words in this group ending with fricatives like /s/ as in glass [glɑ:s], /z/ as in nose [noz], /-ʃ/ as in fish [fɪʃ], and /-v/ as in give [gɪv]. Table 5.13.1 shows different numbers of tokens produced by each group in different test for 120, 92 and 108 prompts for the control group, Meta lx group and PLD group respectively.

Table 5.13.1: Final Fricatives: Picture Naming

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**26**	**0** 0.00%	**38**	**1** 2.63%	**43**	**0** 0.00%
Meta lx Group (n = 23)	-	-	**45**	**12** 26.67%	**43**	**17** 39.53%
PLD Group (n = 27)	-	-	**49**	**10** 20.41%	**51**	**11** 20.57%

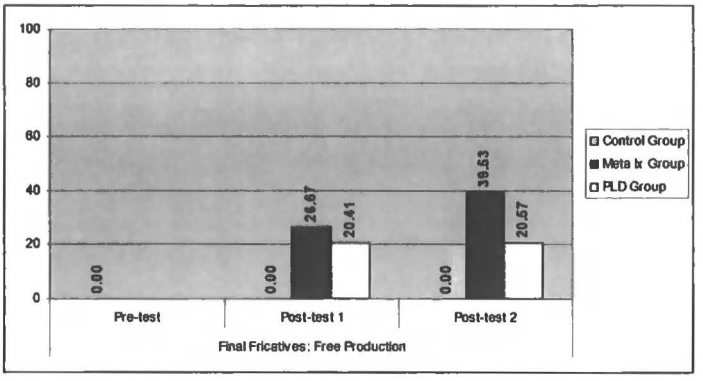

Figure 5.10: Final Fricatives: Picture Naming

We see again that, from Table 5.13.2 and Figure 5.10, only incorrect English words were produced by the control group. In post-test 2, the control produced some correct target-like words, but it was Meta-lx group that did the best and the PLD group which came second. In post-test 2, the Meta-lx group still performed the best followed by the PLD group while the control group did not produce any correct English words ending with fricatives. It is interesting to see that the performance of both experimental groups, the Meta-lx and the PLD group, is higher than their performance on post-test 1, but the Meta-lx group's is much higher. (Empty cells indicate where too few valid cases existed to perform the Mann-Whitney Test.)

Statistical interpretation, as shown in Table 5.13.2, indicates that significant differences were found in both post-tests between control group and the experimental groups. The difference between the control group and the Meta lx group for post-test 1 and post-test 2 was significant (at p-value=.000). And a significant difference between the control group and the PLD lx group for post-test 1 was found (at p-value=.012) and for post-test 2 (at p-value=.001). A significant difference (at p-value=.027) was also found between the Meta-lx group and the PLD group for post-

test 2 but not for post-test 1. We will return to these differences in the discussion sections below.

Table 5.13.2: Final Fricatives: Picture Naming

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000	-	.0000 33.3300	-3.856*, (.000)	.0000 50.0000	-4.546*, (.000)
Control PLD	.0000	-	.0000 .0000	-2.515*, (012)	.0000 .0000	-3.492*, (.001)
Meta lx PLD	-	-	33.3300 .0000	-1.194, (.194)	50.0000 .0000	-4.546*, (.027)

* Significant value at .05

This set of sounds for the picture naming test included pictures where learners were expected to give words ending in /n/, /v/, /t/ after /aɪ/. This included four words ending with /n/as in nine [naɪn], /v/ as in five [faɪv], /t/ as in white [waɪt], and /s/ as in rice [raɪs]. For 120, 92 and 108 prompts for control group, Meta lx group and PLD group, learners from each group produced the different numbers of tokens in different tests shown in Table 5.14.1

Table 5.14.1: Final /n/, /t/, /v/,/s/ after /ai-/: Picture Naming

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**34**	**0** 0.00%	**81**	**0** 0.00%	**95**	**0** 0.00%
Meta lx Group (n = 23)	-	-	**43**	**7** 16.67%	**27**	**5** 18.52%
PLD Group (n = 27)	-	-	**47**	**6** 12.76%	**47**	**2** 4.26%

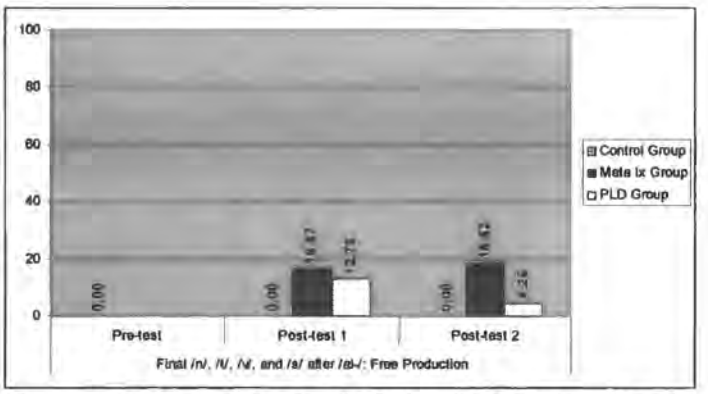

Figure 5.11: Final /n/, /t/, /v/,/s/ after /ai-/: Picture Naming

Yet again the control group did not produce any target-like words at any of the three testing times. On post-test 1 and post-test 2, the Meta-lx group again performed better than the PLD group: they were slightly better than the PLD group in post-test 1and much better in post-test 2. The PLD group performed lower in post-test 2 than that in post-test 1, on the other hand, Meta-lx group improved their performance slightly in post-test 2 from that in post-test 1.

From Table 5.14.2 we can see that the difference between control group and Meta lx group for post-test 1 was significant (at p-value=.001) and for post-test 2 was significant (at p-value=.000), while a significant difference between the control group and the PLD group was found (at p-value=.004) for post-test 1, but not found in post-test 2. And for the Meta-lx group and the PLD group these differences were also significant (at p-value=.034) for post-test 2 but were not significant for post-test 1.

Table 5.14.2: Final /n/, /s/, /t/, /v/ after /ai-/: Picture Naming

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000	-	.0000 .0000	-3.492*, (.001)	.0000 .2000	-4.409, *(.000)
Control PLD	.0000	-	.0000 .0000	-2.890*, (.004)	.0000 .0000	-1.631, (.103)
Meta lx PLD	-	-	.0000 .0000	-1.194, (.194)	.2000 0000	-2.034*,(.034)

* Significant value at .05

The last set of the picture naming task items included 10 English words ending in consonant clusters like words that end in /-nd/ as in hand [hænd], /-ndʒ/ as in orange ['ɒrɪndʒ], /-ŋk/ as in pink [pɪŋk], /-mp/ as in lamp [læmp], /-lt/ as in belt[bɛlt], /-lk/ as in milk [mɪlk], /-ks/ as in box [bɔks], ox [ɔks], and six [sɪks], and /-sk/ as in desk [dɛsk].

Table 5.15.1: Final Clusters: Picture Naming

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**56**	**0** 0.00%	**151**	**0** 0.00%	**173**	**0** 0.00%
Meta lx Group (n = 23)	-	-	**81**	17 20.99%	**91**	**29** 30.77%
PLD Group (n = 27)	-	-	**135**	**22** 16.40%	**143**	**23** 16.10%

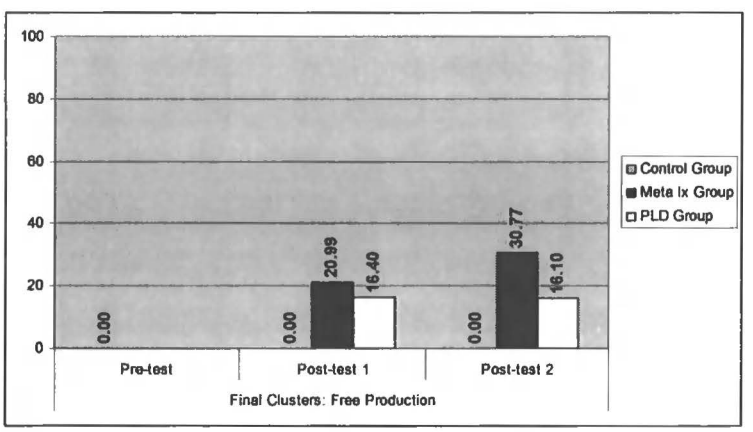

Figure 5.12: Final Clusters: Picture Naming

Again the control group produced no correct English words ending in this set of clusters, and again on post-test 1 and post-test 2, a similar pattern of language performance by both experimental groups is shown. In these two tests, the Meta-lx group outperformed the PLD group (and the control group). Moreover, the Meta-lx group performed better in post-test 2 than in post-test 1 while the PLD group showed similar performance in both tests.

When statistics are applied, as shown in Table 5.15.2, we find significant differences (at p-value=.000) between the control group and the other two groups both testing times, and the differences between the Meta-lx group and the PLD group are significant (at p-value=.000) for post-test 2 but not for post-test 1.

Table 5.15.2: Final Clusters: Picture Naming

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000	-	.0000 .0000	-3.886, *(.000)	.0000 .1700	-4.409, *(.000)
Control PLD	.0000	-	.0000 .0000	-3.561, *(.000)	.0000 .0000	-1.054, (292)
Meta lx PLD	-	-	.0000 .0000	-.660, (.509)	.1700 .0000	-3.648, *(.000)

* Significant value at .05

5. 6. 3 Stress: repeat after tape

Let's now look at the results from the production of English words with different stress patterns. As noted above, the data were obtained from two different types of test: the repeat-after-tape test, where learners repeated words they heard, and the picture naming test where learners named the pictures they saw. We will first look at the results from the repeat-after-tape test by stress type. Note again that number of tokens is limited by the national Thai curriculum vocabulary at primary school level (see Appendix D).

With the results from the baseline study showing little acquisition of English stress and assuming transfer from Thai as a tone and not a stress language, we are interested to see if there is any improvement after treatment which provides young learners with native-speaker input. We start by considering the results from the repeat-after-tape test for two syllable-words with final stress. On this test there were only two words: Hello[-'], and Goodbye[-']. Table 5.16.1 shows that for the 60, 46, and 54

prompts for control group, Meta lx group and PLD group, different numbers of tokens were produced of by each group in different tests.

Table 5.16.1: Two-syllable words with final stress: Repeat after Tape

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total Target frequency
Control (n=30)	**60**	**7** 11.67%	**60**	**20** 33.33%	**60**	**13** 21.67%
Meta lx Group (n = 23)	**44**	**11** 25.00%	**44**	**36** 81.82%	**44**	**38** 86.36%
PLD Group (n = 27)	**53**	**12** 22.64%	**54**	**50** 92.59%	**54**	**52** 96.30%

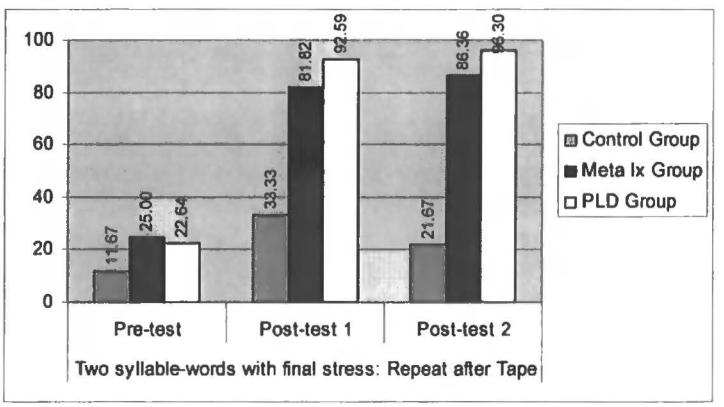

Figure 5.13: Two-syllable words with final stress: Repeat after Tape

What we can see from Table 5.16.1 and Figure 5.12 is that the control group is able to produce some correct words, as we saw on the repeat-after-tape test for syllable structure. The table and chart show that the Meta-lx group performed the best on the pre-test, where they correctly pronounced two-syllable English words with final stress more often than the other two groups. In post-test 1, progress was made among all three groups, but the two experimental groups were able to produce two-syllable words with final stress correctly more often than the control group. In this test, it turns out to be the PLD group who did the best. The pattern of performance is similar in post-test 2, with the PLD group performing a bit better than the Meta lx group, and

both groups performing slightly better than in post-test 1. However, the performance of the control group declines from post-test 1.

With respect to statistical interpretation, as shown in Table 5.16.2, a significant difference at (at p-value=.000) was found between the control group and the other two groups for post-test 1 and post-test 2 but not in the pre-test. And no significant difference was found at any of the testing points between the Meta-lx group and the PLD group.

Table 5.16.2: Two syllable words with final stress: Repeat after Tape

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000 .0000	-1.495, (.135)	50.0000 100.0000	-4.309, *(.000)	.0000 100.0000	-5.401, *(.000)
Control PLD	.0000 .0000	-1.252, (.211)	50.0000 100.0000	-5.619, *(.000)	.0000 100.0000	-6.533, *(.000)
Meta lx PLD	.0000 .0000	-.292, (.770)	100.0000 100.0000	-1.432, (.152)	100.0000 100.0000	-1.540, (.124)

* Significant value at .05

The word list for 2-syllable words with initial stress included a larger number of words than for final stress. These were 16 words: pencil[' -], window[' -], apple[' -], orange[' -], mango[' -], seven[' -], yellow[' -], Sunday[' -], Monday[' -], Tuesday[' -], Wednesday[' -], Thursday[' -], Friday[' -], sorry[' -], water[' -], and ice-cream[' -]. Table 5.17.1 shows that there were 480, 368 and 432 prompts for the control group, Meta lx group and PLD group respectively. Each group produced varying tokens on the three different tests.

Table 5.17.1: Two syllable-words with initial stress: Repeat after Tape

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total Target frequency
Control (n=30)	**465**	**363** 78.06%	**474**	**420** 88.61%	**477**	**354** 74.21%
Meta lx Group (n = 23)	**349**	**322** 92.26%	**365**	**351** 96.16%	**367**	**352** 95.91%
PLD Group (n = 27)	**416**	**389** 93.51%	**432**	**413** 95.60%	**432**	**415** 96.06%

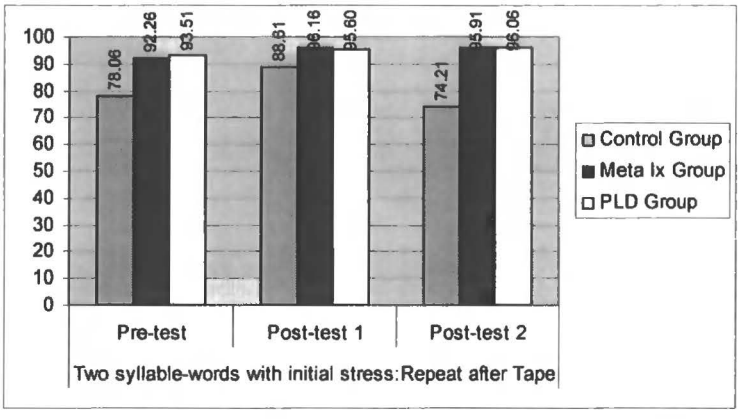

Figure 5.14: Two syllable-words with initial stress: Repeat after Tape

Table 5.17.1 and Figure 5.13 show all that three groups did really well in pronouncing two-syllable English words with initial stress. The control group and the two experimental groups scored very highly. All testing points show similar patterns of performance where the Meta-lx group and the PLD group perform equally high, and higher than the control group.

Even though the control group seemed to do well, interpretation through statistics, as shown on Table 5.17.2, reveals a significant difference (at p-value=.000) at all testing points between the control group and the other two groups. There were no significant differences found between the Meta-lx group and the PLD group.

Table 5.17.2: Two syllable words with initial stress: Repeat after Tape

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	81.2500 93.7500	-3.593, *(.000)	93.3300 100.000 0	-4.094, *(.000)	78.1250 93.7500	-5.532, *(.000)
Control PLD	81.2500 93.7500	-4.033, *(.000)	93.3300 93.7500	-4.054, *(.000)	78.1250 93.7500	-5.781, *(.000)
Meta lx PLD	93.7500 93.7500	-.328, (.743)	100.000 0 93.7500	-.661, (.508)	93.7500 93.7500	-.194, (.846)

* Significant value at .05

The group of words for repeat-after-tape test in relation to the stress pattern of English word with three or more syllables included four words of Saturday ['--], banana[-'-], Good morning[-'-], and Good afternoon [---']. Table 5.18.1 shows that from the number of 120, 92 and 108 prompts for control group, the Meta-lx group and PLD group respectively, the three groups differed in their overall production.

Table 5.18.1: Three or more syllable-words: Repeat after Tape

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	**102**	**80** 78.43%	**110**	**88** 80.00%	**116**	**90** 77.59%
Meta lx Group (n = 23)	**77**	**64** 83.12%	**88**	**77** 87.50%	**90**	**79** 87.78%
PLD Group (n = 27)	**92**	**73** 79.35%	**108**	**106** 98.15%	**106**	**104** 98.11%

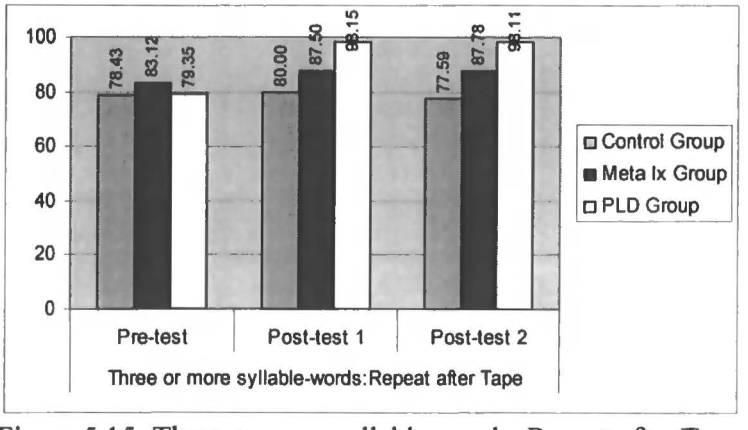

Figure 5.15: Three or more syllable-words: Repeat after Tape

Table 5.18.1 and Figure 5.14 show that through the repeat-after-tape test, all three groups also did really well in producing correctly stressed English words with three or more syllables. All of them showed similar performance on the pre-test, and the control group did slightly better than the other groups. The pattern of performance on post-test 1 looks similar to that for post-test 2, where the PLD group performs the best, followed by the Meta-lx group. The control group tends to maintain the same performance through all the tests.

Interpretation through statistics shows that no significant difference was found among the groups in the pre-test, as shown in Table 5.18.2. From post-test 1, it was found that there was a significant difference between the control group and the PLD group was (at p-value=.000), and the Meta-lx group and the PLD group (at p-value = 007). A significant difference existed between the Meta-lx group and the PLD group (at p-value=.002). On post-test 2 significant differences were found between the control group and Meta-lx group (at p-value=049) and between the control group and the PLD group (at p-value= .000). Significance differences were also found on this test between the Meta-lx group and the PLD group (at p-value=.003).

Table 5.18.2: Three of more syllable-words: Repeat after Tape

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	79.4453 83.3339	-.722, (.470)	81.3890 88.0435	-1.612, (.107)	78.3333 88.0435	-1.964, *(.049)
Control PLD	79.4453 79.6296	-.304, (.761)	81.3890 98.1481	-4.337, *(.000)	78.3333 98.1481	-4.554, *(.000)
Meta lx PLD	83.3339 79.6296	-.354, (.723)	88.0435 98.1481	-2.713, *(.007)	88.0435 98.1481	-2.964. *(.003)

* Significant value at .05

The results of the repeat-after-tape test show in part that learners are good at mimicking, as mentioned above. Remember that the experimental groups had had no exposure to English, yet these children were still slightly better than the control group on the pre-test. Will the picture naming test results show a different pattern for stress? Let us see.

5. 6.4 Stress: Picture naming test

When we turn to the picture naming results, where the data were collected through a procedure where the learners had to say the words when they saw pictures, the pattern of production is very different from that obtained from the repeat-after-tape test. Note that for some of the cells for the experimental groups (the pre-test), there are zero productions (shown as -) because the children had not yet learned these words.

The picture naming test was of the same two words as the repeat-after-tape test, i.e. of two-syllable words or expressions with final stress: Hello [-'], and Goodbye [-']. Table 5.19.1 shows that for the number of 60, 46, and 54 prompts for control group, Meta-lx group and PLD group, different numbers of tokens were produced of by each group in different tests.

Table 5.19.1: Two syllable-words with final stress: Picture Naming

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total target frequency
Control (n=30)	-	-	**5**	**0** 0.00%	**16**	**0** 0.00%
Meta lx Group (n = 23)	-	-	**19**	**18** 94.74%	**23**	**22** 95.65%
PLD Group (n = 27)	-	-	**27**	**25** 92.59%	**31**	**30** 96.77%

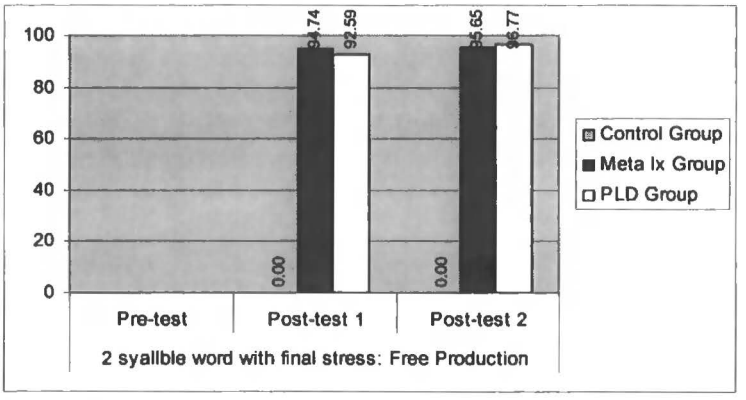

Figure 5.16: Two syllable-words with final stress: Picture Naming

As with the results from picture naming for syllable structure, we see that even the control group, who had learned these words during the semester they took English from a Thai teacher, produces no target-like pronunciations. In post-test 1 and post-test 2, the performance of the Meta-lx group and the PLD group is strikingly equally high on both tests. The control group, on the other hand, produced no correctly stressed two-syllable English words in either post-test 1 or post-test 2.

The performance between Meta-lx group and the PLD group does not look much different, and this agrees with the statistical interpretation, as shown in Table 5.19.1 in that no significant difference was found between these two groups in the two post-tests.

Table 5.19.2: Two syllable-words with final stress: Picture Naming

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	-	-	.0000 100.0000	-4.378,*(.000)	.0000 100.0000	-5.739,*(.000)
Control PLD	-	-	0000 100.0000	-4.479,*(.000)	.0000 100.0000	-5.849,*(.000)
Meta lx PLD	-	-	100.0000 100.0000	-.417,*(. 677)	100.0000 100.0000	-.103,*(. 918)

* Significant value at .05

The same 16 words as on the repeat-after-tape test were also used for English words with initial stress: pencil[' -], window[' -], apple[' -], orange[' -], mango[' -], seven[' -], yellow[' -], Sunday[' -], Monday[' -], Tuesday[' -], Wednesday[' -], Thursday[' -], Friday[' -], sorry[' -], water[' -], and ice-cream[' -]. Table 5.20.1 shows that there were 480, 368 and 432 prompts for control group, Meta lx group and PLD group respectively. Each group produced varying numbers of tokens in different tests.

Table 5.20.1: Two syllable-words with initial stress: Picture Naming

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items	Total target frequency	No of items	Total target frequency	No of items	Total Target frequency
Control (n=30)	**201**	**0** 0.00	**265**	**0** 0.00	**324**	**0** 0.00
Meta lx Group (n = 23)	-	-	**133**	**118** 88.72	**167**	**146** 87.43
PLD Group (n = 27)	-	-	**190**	**166** 87.37	**198**	**165** 83.33

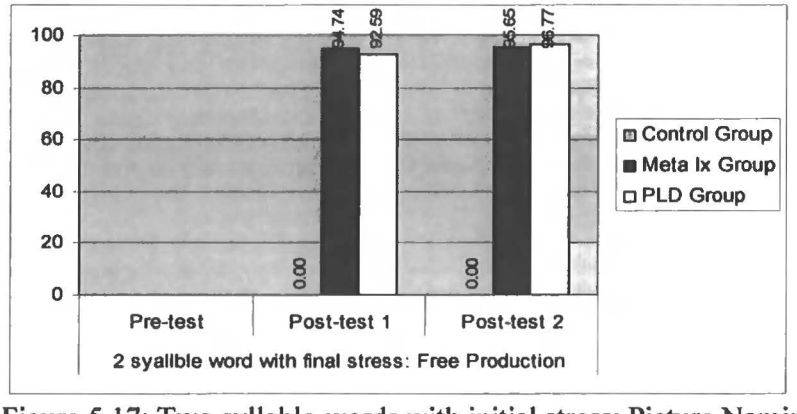

Figure 5.17: Two syllable-words with initial stress: Picture Naming

Again from Table 5.20.1 and Figure 5.15, we see that the control group did not produce correctly stressed two-syllable English words with final stress on the pre-test. On post-test 1 and post-test 2, the Meta-lx group and PLD group again show very high performance of correctly stressed English words from this set, whereas the

control group, as on the pre-test, did not manage to produce correctly stressed two-syllable English words.

Apart from a significant difference (at p-value=.000) between the control group and the experimental groups, no significant differences were found in post-test 1 and post-test 2 between the Meta-lx group and the PLD group. (Where cells are empty, there were not enough valid cases to perform the Mann-Whitney Test.)

Table 5.20.2: Two syllable-words with initial stress: Picture Naming

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta lx	.0000	-	.0000 85.7100	-6.860, *(.000)	.0000 87.5000	-6.855, *(.000)
Control PLD	.0000	-	.0000 87.5000	-7.012, *(.000)	.0000 87.5000	-7.008, *(.000)
Meta lx PLD	-	-	85.7100 87.5000	-.079, (.937)	87.5000 87.5000	-.460, (.645)

* Significant value at .05

Finally, the group of words for the picture naming test in relation to the stress pattern of English word with three or more syllables included four words of : Saturday['--], banana[-'-], Good morning[-'-], and Good afternoon [---']. Table 5.21.1 shows that from the number of 120, 92 and 108 prompts for the control group, Meta lx group and PLD group respectively, the three groups differed in their production.

Table 5.21.1: Three or more syllable-words: Picture Naming

Subject	Pre-test		Post-test 1		Post-test 2	
	No of items produced	Total target frequency	No of items produced	Total target frequency	No of items produced	Total target frequency
Control (n=30)	**30**	**0** 0.00	**43**	**3** 6.98	**52**	**1** 1.92
Meta lx Group (n = 23)	-	-	**39**	**36** 92.31	**44**	**43** 97.73
PLD Group (n = 27)	-	-	**43**	**39** 90.70	**51**	**44** 86.27

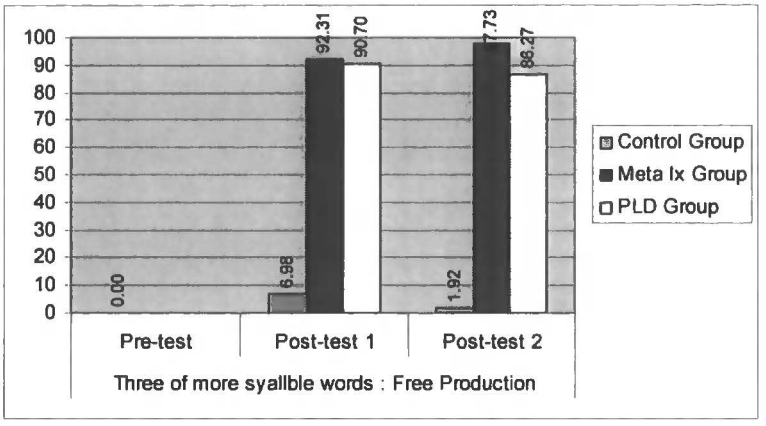

Figure 5.18: Three of more syllable-words: Picture Naming

From Table 5.21.1 and Figure 5.16, we see that the control group did not produce any correctly stressed English words with three or more syllables. Considerably higher performance was found for the Meta-Ix group and the PLD group in both post-test 1 and post-test 2. The control group was much lower in these two tests.

As we see in Table 5.21.2, through statistical calculation, there is again a significant difference (at p-value=.000) between the control group and the other two groups in both post-test 1 and post-test 2. But no significant difference is found in post-test 1 and post-test 2 between the Meta Ix group and the PLD group.

Table 5.21.2: Three or more syllable-words : Picture Naming

Group	Pre-test		Post 1		Post 2	
	Median	U statistic (p-value)	Median	U statistic (p-value)	Median	U statistic (p-value)
Control Meta Ix	.0000	-	.0000 100.0000	15.811, *(.000)	.0000 100.0000	-6.847, *(.000)
Control PLD	.0000	-	.0000 100.0000	-6.110, *(.000)	.0000 100.0000	-6.954, *(.000)
Meta Ix PLD	-	-	100.0000 100.0000	-.019, (.985)	100.0000 100.0000	-1.706, (.088)

* Significant value at .05

5.6.5 Overall scores of syllable structure

Now let's look at the overall performance of English syllable structure by all groups of young Thai L2 learners through their production on the repeat-after-tape test. The overall figures shown below were obtained by the combination of all performance in relation to English syllable structure produced by all three groups.

The figure shows that none of the three groups did very well on the pre-test; however, the performance of the Meta-lx group and the PLD group looks somewhat better than that of the control group.

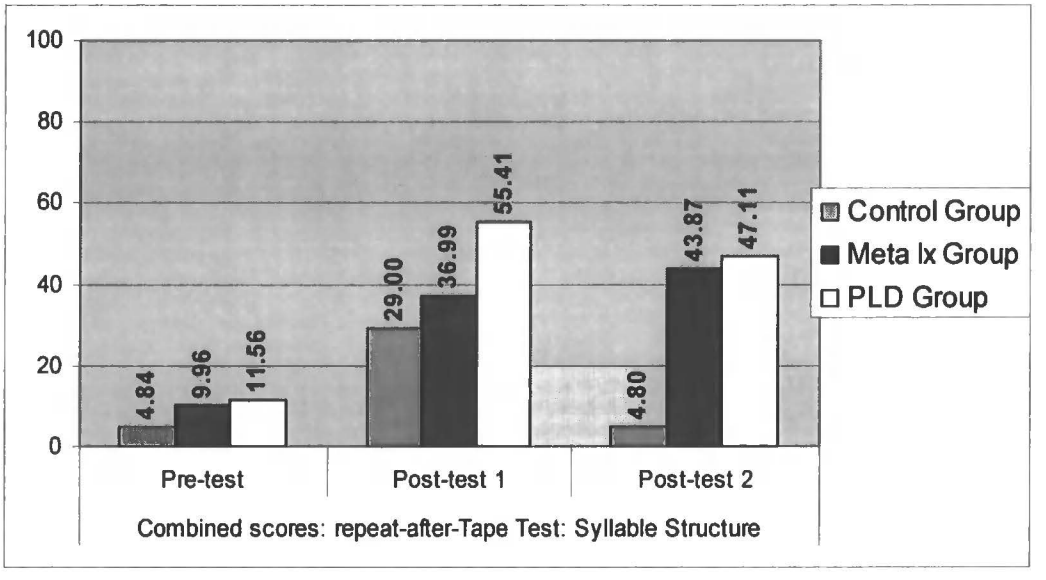

Figure 5.19: Combined scores figure: Repeat after tape: Syllable structure

Considerable improvement has been made by all three groups on the second time of the test, and the PLD group outperformed the other two groups. The control group was the least successful. Surprisingly, on the second post-test, the performance of both the control group and the PLD group did not show any improvement from post-test 1, but the Meta-lx group who continued to progress. In fact, the performance of

the control group dramatically declined from their performance on the post-test 1 (to the same level as on the pre-test), and the PLD group's performance slightly declined.

In terms of the picture-naming test with syllable structure, this again shows that the control group did not do well on all three tests.

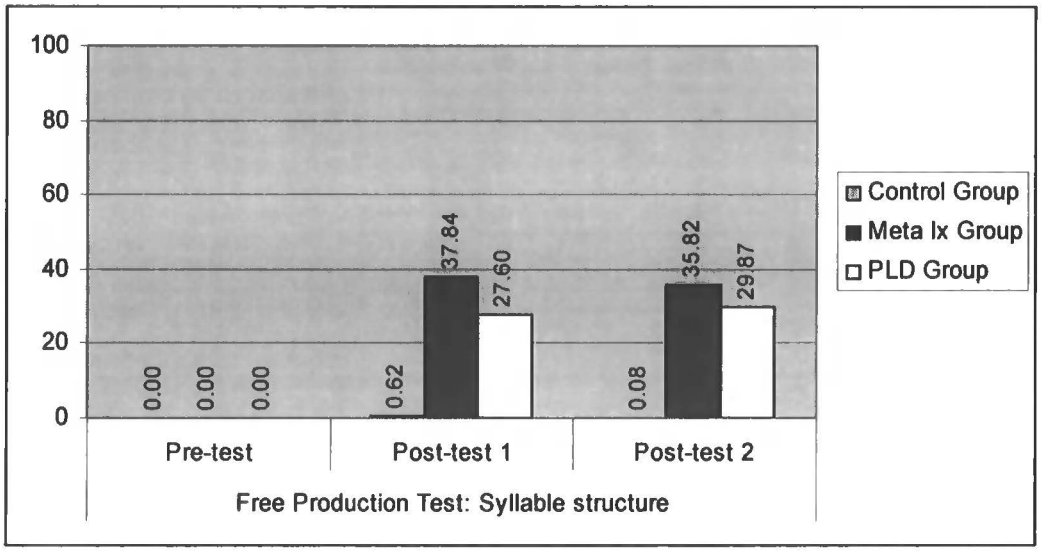

Figure 5.20: Combined scores figure: Picture-naming: Syllable structure

Only the two experimental groups did well on post-test 1 and post-test 2. There are minimal differences between post-test 1 post-test 2, but there are larger differences between the Meta-lx group and the primary linguistic data group on post-test 1 than on post-test 2. The Meta-lx group seems to be doing somewhat better than the PLD group. These results suggest that raising metalinguistic consciousness for syllable structure seems to work, even with young learners. But the results also show that it is not necessary to use this method to get good results from young learners.

The analysis of the data and application of statistical measurement allow us to reject the null hypothesis. There are also interesting differences among the groups that I will now discuss here.

5.6.6 Overall scores for stress

The next chart represents the overall performance of learners in relation to two-syllable words with both final and initial stress as well as the pronunciation of English words with three or more syllables.

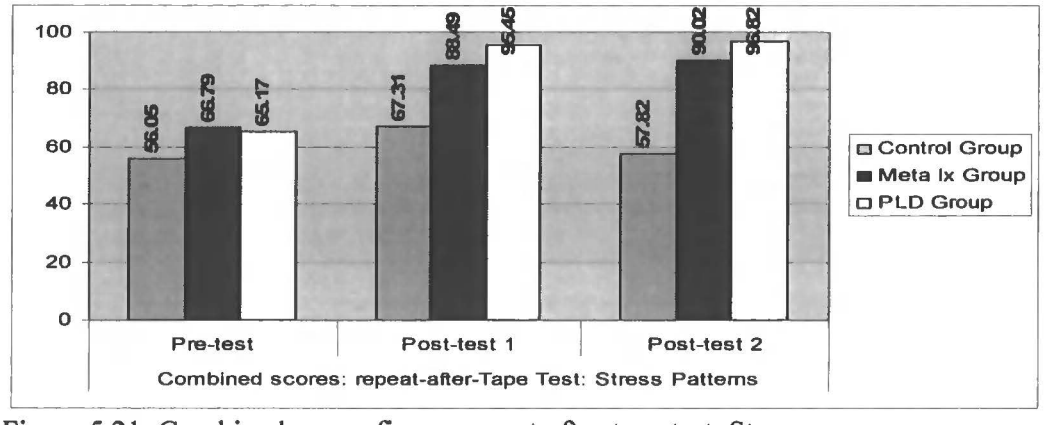

Figure 5.21: Combined scores figure: repeat-after-tape test: Stress

Here on the repeat-after-tape test the learners' raw mimicking ability was partly involved, as already noted a number of times. Yet there are differences between the groups. The performance of all groups in English stress patterns looks relatively high. However, the figure shows that the control group, who had started learning English one term before the other two experimental groups, performed a little bit lower than the other two groups on the pre-test. Some improvement was made in post-test 1, but then declined in post-test 2, just like what we saw above for syllables. The control group were the least successful in all tests compared with other two groups. The Meta-Ix group and PLD groups exhibited a similar pattern of

improvement in that they both gradually made progress from pre-test to post-test 1 and to post-test 2, and the Meta-lx group was slightly better than the PLD group in the pre-test but the PLD group overtook them on both post-test 1 and 2. Both experimental groups were better than the control group on Post-test 1 and Post-test 2. This suggests native input, not just mimicking ability, is somehow involved in the differences between the control group and the experimental groups.

When looking at the language performance of stress patterns in English of the three groups of young Thai L2 learners of English on the picture-naming test, the outcome by the control group is strikingly different from that on the repeat-after-tape production.

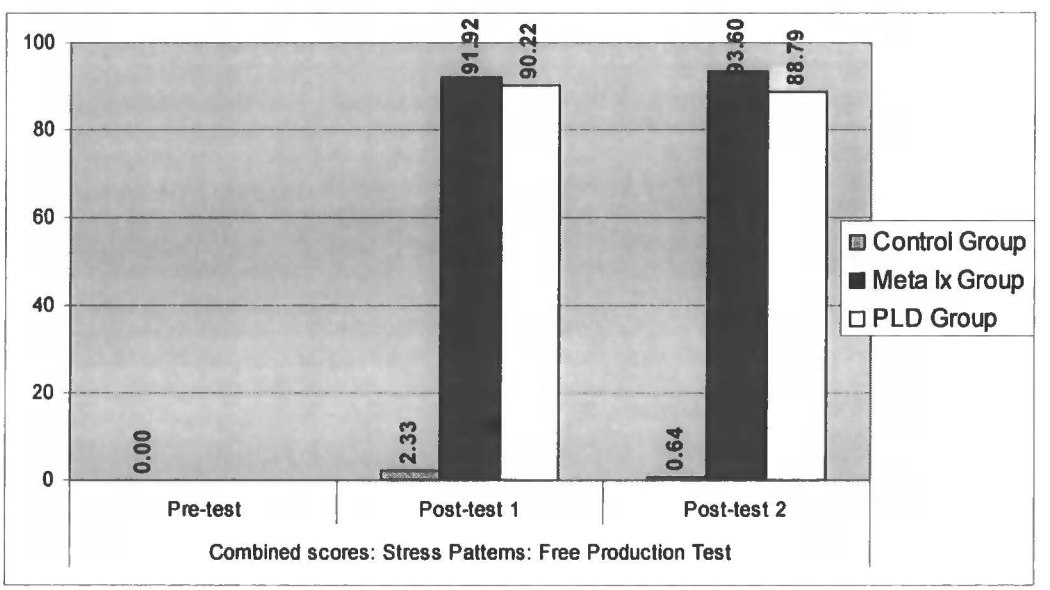

Figure 5.22: Combined scores figure: Picture-naming test: Stress

The figure shows that, in relation to English stress on the picture-naming task, the control group did not show any signs of acquisition of stress on any of the tests, though they could manage to produce some correctly stressed words on post-test 1 and post-test 2. The two experimental groups did exceptionally well on both post-test

1 and post-test 2, though they did not produce any words on the pre-test, owing to the fact that they had never been exposed to any English at that point. Both experimental groups show similar degrees of success in acquiring stress when compared with the control group on the post-tests.

In comparison to the repeat-after-tape test with syllable structure, the results indicate that the Meta-lx group and the PLD group did much better on primary stress in English than on syllable structure. On the other hand the control group did better on English syllable structure than they did on stress.

5.7 Errors made by Thai learners on syllable structure

Now that we have described the results of these tests, we will now have a look at the results from the young Thai L2 learners of English in my study to determine whether the control group's and the experimental group's beginning interlanguage differs. Does getting native speaker input make a difference in the errors they produce? We will only look at this for syllable structure, as the percentages of error type (usually either equal stress on all syllables or final stress) produced with respect to stress did not vary between the control group and the experimental groups.

Recall the discussion in Chapter 2 on the idea that interlanguage can be seen as a system based on the best attempt by L2 learners to produce language in response to the linguistic stimuli surrounding them. Learners' interlanguage should not be treated as a sign of bad habits (Lado 1957). Errors should be considered as a reflection of L2 learners' developing second language system and as a natural part in L2 learning process (Corder 1967). And going back to Selinker (1972), this system is thought to

be neither that of their native tongue nor that of the target language. Through a gradual process, L2 learners move closer to approximating the system of the target language. For syllable structure, the L2 learner who does not yet have enough linguistic competence to cope with the target language material adopts processes or strategies to cope with situations where L2 production is required. So we can assume that errors show that development is taking place.

The discussion here will only be based on the results from the picture-naming test in which learners had to produce language in response to pictures. This type of task is more likely to lead to production that represents learners' interlanguage than their performance on the repeat-after-tape test in which children's ability to mimic a native speaker's pronunciation is also involved, as we have discussed above. To gain clearer insight into interlanguage development as it might relate to the kind of input (from non-native vs. native speakers) learners received, we are going to look at the post-test 1 and post-test 2 data collected from learners in each of the three groups of Thai L2 learners of English.

Table 5.21 and Figure 5.21 show the target English words with initial clusters on the tests. In relation to picture-naming of English words with initial clusters, when faced with task of pronouncing sequences of consonants that are not allowed in Thai, all three groups of Thai L2 learners of English tended to employ three main strategies: deletion, substitution and epenthesis to bring English syllable structure into conformity with Thai syllable structure.

Table 5.22 Picture-naming of clusters in initial position

Subject	No of items	Target %	Deletion %	Substitution %	Epenthesis %
Control (n=30)	328	2 0.61	314 95.73	12 3.66	0 0.00
Meta lx Group (n = 23)	203	61 30.05	125 61.58	13 6.40	4 1.97
PLD Group (n = 27)	209	42 20.10	138 66.02	13 13.40	1 0.44

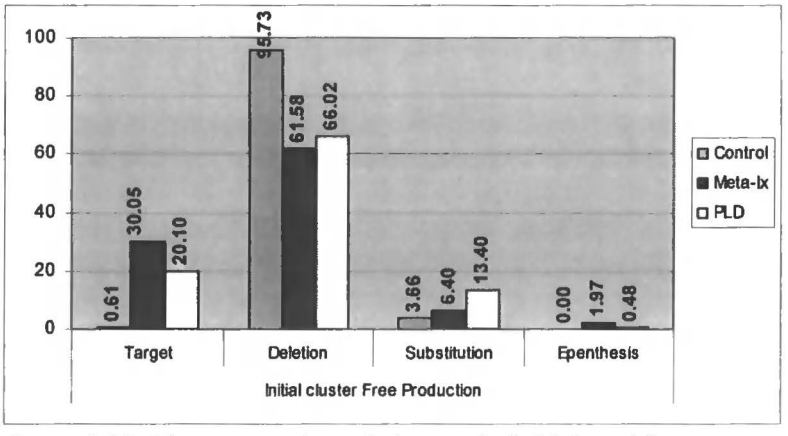

Figure 5.23: Picture-naming of clusters in initial position

The table and the chart shows that the strategy all learners depended on the most was deletion, especially from the control group who relied almost completely on this strategy. The Meta-lx group and the PLD group show a similar amount of words produced through this strategy, but with a considerably lower percentage than the control group. Applying the strategy of deletion, examples that demonstrate this are when words like *three* become [tɪ:], *Friday* becomes ['faɪ'dɛ:], *blue* becomes [bu:], and *clock* becomes [kɔkˀ]. All of these syllable modifications are shared by learners in all three groups. The way this strategy of deletion is used seems to show that all three groups are similarly affected by their L1 background of Thai in that colloquial spoken Thai does not allow consonant clusters in initial position.

A number of words are also incorrectly produced through the use of consonant substitution and vowel epenthesis. Through substitution, it is interesting to see how the control group and the two experimental groups produced English words with initial clusters in their own way. Let's first have a look at data in relation to consonant substitution from the control group.

Of the total of twelve words produced by the control group through substitution, there are five clusters with different variations. This is when /fr-/ clusters were substituted with either a cluster consisting of [kw-] or a single consonant with [w]. Examples can be seen when a word like *Friday* was pronounced as ['kwɑɪ'dɛ:] or ['wɑɪ'dɛ:], /fl-/ clusters can become [kw] as in [kwæt˺] for *flag*, a cluster of /kl-/ is reduced to [f-] as in [fɔp˺],for *clock* and there are two variations of [gr-] produced by this group; one of them is when they were substituted with [gl-] as in [gli:n] for *green* and the other substitution for /gr-/ is [k-] as in [ki:m] for the same English word of *green.*

As for those substitutions in target clusters attempted by the Mt-lx group, clusters of /θr-/were substituted with different types of clusters or one new single consonant. Examples are shown when /θr-/ clusters were substituted with other clusters like [fr-], [pr-], [tr-], and [f-] thus a word like *three* was pronounced as [fri:], [pri:], [tri:] or [fi:]. With clusters of /fl-/, they could be substituted with three different clusters of [kl-], [pl-], [kw-]. This was found in the pronunciation like [klæk˺] for *flag* , [plɑɪ] for *fly*, and [kwɑɪʃ] also for the

same production of the word of *fly*. Another substitution found is when /gr-/was substituted with [kl-] as when the word *green* was pronounced as[kli:m].

When producing some English words with /θr-/, the PLD group sometimes substituted them with a single consonant like [s-] and [f-] as can be seen in [si:] for *three*, and [fi:] for the same word of *three*. The substituted clusters for /fl-/ found in the PLD group also includes [kw-], the same as that in control group, and [fr-] when the pronunciation of [kwɑɪ]and [frɑɪ]are found for *fly*. The /bl-/ clusters were substituted with [fl-] as well as with a new single consonant of [l-], [w-], or [p-]. Thus the word *blue* was heard to be pronounced as [flu:], [lu:], and [wu:], and the word *black* was pronounced as [pæk]. With respect to /gl-/ clusters, they were found to be substituted with [kl-] when *glass* was pronounced as [klɑ:tˀ]. Finally, for the clusters of /gr-/, they were found substituted with [w-], [gl-] when *green* was pronounced as [wi:n], and [gli:n].

It is surprising that epenthesis is also found in the process of L2 acquisition among Thai learners given that Sato (1987) did not find this with the young Vietnamese she studied. But the number of such production errors is very small. Among the total of four English words produced through epenthesis, words like *fly* were pronounced as [falɑi], *clock* was pronounced as [kɑlɔk], and *blue* was pronounced as [bulu:]. Interestingly, these words were all produced by the Meta-lx group. There was a single word with epenthesis produced by the PLD group: *blue* pronounced as [bəlu:], however, no epenthesis was found for the control group.

Now we turn to the specific errors made in the set of words ending in final /l/, not permissible in Thai. The words included *apple* ['æppl], *doll* [dɔl], *ball* [bɔl], and *pencil* ['pensl]. When faced with the task of pronouncing this set of words, these Thai L2 learners of English again employed different strategies which include deletion, epenthesis and substitution. Substitution was with /n/, with /w/, and with other consonant(s) other than /n/ and /l/.

Table 5.23: Picture-naming of words with final /l/

Subject	No of items	Target %	Deletion %	/n/ Substitution %	/w/ Substitution %	Sub w/ other consonant/s %	Epenthesis %
Control (n=30)	174	0 0.00	22 12.64	60 34.48	92 52.87	0 0.00	0 0.00
Meta lx Group (n = 23)	145	70 48.28	20 13.79	0 0.00	49 33.79	6 4.14	0 0.00
PLD Group (n = 27)	151	77 51.00	5 3.31	0 0.00	59 39.10	8 5.3	2 1.32

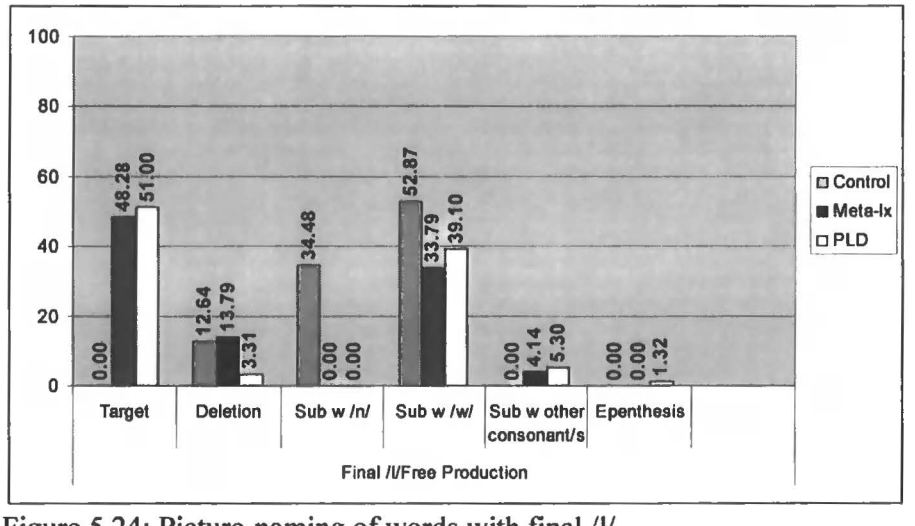

Figure 5.24: Picture-naming of words with final /l/

With respect to deletion, all groups shared similar pronunciation using this strategy, with a relatively low frequency of errors involving deletion. Examples of words produced through this strategy include *doll,* which was pronounced as[dɔ:], *ball,*

which was pronounced as [bɔ:], and *apple*, which was pronounced as ['æppɜ]. In relation to substitution with /n/, only the control group tends to rely much on this strategy when dealing with English words ending in /l/. Examples of words can be demonstrated as from words like *apple,* when pronounced as ['æp'pɜn], *ball* when pronounced as [bɔ n], and *doll,* when pronounced as [dɔ n]. It is possible to assume that learners were affected by L1 influence when they employed the two types of strategies of deletion and substitution with /n/. In Thai only syllables ending in unreleased voiceless stops, glides and /n/ are allowed, as discussed in Chapter 2. Substitution with /w/ for the English final /l/ seems to share a high frequency for these three groups. Examples can be seen in words like *pencil* produced as ['pensɪw], *apple* produced as['æppɜw], and *doll* produced as[dʒɔ :w].

It is quite interesting to see that there are two other different strategies used, i.e. substitution with a single consonant or clusters involving consonants other than /n/ and /w/, by the Meta-lx and PLD groups, and epenthesis, by the PLD group. These two strategies were not used at all by the control group. The Meta-lx group substituted final /l/ with different consonants like [-ʃ] as in [dʒɔ:ʃ] for *doll,* and [bɔ :ʃ] for *ball,* and with [-s] as in *doll* [dʒɔ :s], *apple* ['æppɜis] and [t˺] as in *ball* [bɑ:t˺]. The PLD group, however, substituted final /l/ with a consonant [-t˺] as in *pencil* ['hɛnsʊt], and with different clusters of [-wʃ] as in *ball* [bɔwʃ], *doll* [dɔ:wʃ], *apple* ['æppɜwʃ], and with [-ns] as in *ball* [bɔns], and even with [-wks]as in *ball* [bɔwks]. As for epenthesis, the PLD group is the only group that epenthesized a pair of English words ending in /l/; these words are *ball* [bɔwə], and

doll [dɔwə]. Possibly they do this when they get native speaker input and at a slightly more advanced stage.

Again, the main strategies employed by the learners when pronouncing English words with final stop sounds were substitution, deletion and epenthesis. The words with final stops which these groups attempted were:

/-t/ = cat[kæt], eight[ɛ:t]
/-d/ = bird[bɜ:d], head[hɛ:d], red[rɛ:d]
/-k/ = black[blæk], clock[klɔk], book [bʊk]
/-g/ = dog[dɔg], egg[ɛ:g], flag[flæg], leg[lɛ:g], pig[pɪg].

Table 5.24: Picture-naming of final stops

Subject	No of items	Target %	Unreleased stop %	Deletion %	Sub 1 %	Sub 2 %	Epenthesis %
Control (n=30)	582	0 0.00	580 99.66	1 0.17	1 0.17	0 0.00	0 0.00
Meta lx Group (n = 23)	247	60 24.29	89 36.03	1 0.40	89 36.03	6 2.43	2 0.81
PLD Group (n = 27)	316	54 17.09	120 37.97	2 0.63	97 30.70	39 12.34	4 1.27

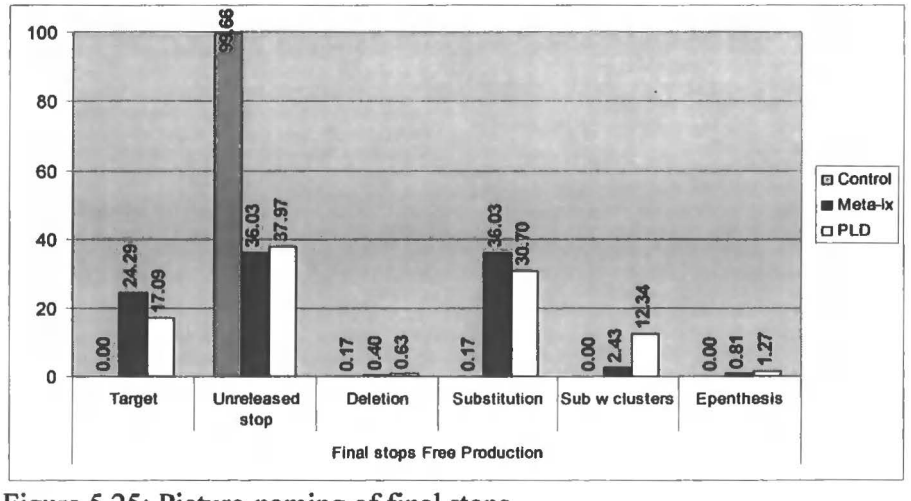

Figure 5.25: Picture-naming of final stops

In fact there were three types of substitution occurring in this picture-naming test. One was the substitution of target language final stops with an unreleased stop. The

control group tended to rely most on this strategy, followed by PLD group and then the Meta-lx group. Examples of common words these three groups of learners shared are as follows: *pig* [pɪkˀ], *egg* [ɛ:kˀ], *bird* [bɜ:tˀ], *cat* [kætˀ], *dog* [dɔkˀ], *clock* [kɔkˀ], *book* [bukˀ]. The second type of substitution that the Mt-lx group and the PLD group, but not the control group, depended on was when an English final stop was replaced with a different consonant. The two experimental groups shared similar variation in this type of substitution. This can be demonstrated when the final voiceless stop /-t/ was substituted with [-s], as *cat* becomes [kæs], or with [-tʃ], as *eight* was pronounced as [etʃ], or with [-ʃ] when *cat* becomes[kæʃ]. Substitution of voiced /-d/ could be made with [-s] as in *red* [lɛ:s], or [-t] as in *bird* [bɜ:t], or [-ʃ] as in *bird* [bɜ:ʃ]. With respect to final voiceless /-k/, one example was produced when it was substituted by [-p] as in *clock* [kɔp]. As for the final voiced /-g/, it could be substituted with [-k] as in *flag* [flæk] or with [-ʃ] as in *leg* [leʃ].

Another type of substitution occurred among the two Mt-lx and PLD groups when a final stop was substituted with a set of clusters. Examples can be seen when a final voiceless /-t/ was replaced with [-ts] as in *cat* [kæts], and with [-tˀk] as in *cat* [kætˀk], as well as a final voiced /-d/, it can either be substituted with [-ts] as in *bird* [bɜ:ts], and or /-st/ as in *bird* [bɜ:st]. With respect to the final voiceless /-k/, one substitution was found when it was replaced with [-ks] clusters as in book [bʊks]. As for the final voiced /-g/, it could be substituted with [-ŋk] clusters as in *pig* [pɪŋk], or [-wk] clusters as in *dog* [dɔ :wk].

Epenthesis was also found in the language production of only the Meta-lx and PLD groups. The words *book* [bʊkʃɪ], and *bird* [bɜ:də], were found produced by the Meta-lx group and the words *dog* [dɔkˈʃi], *flag* [fæʃɪ], and *pig* [pɪŋkə] were produced by the PLD group. There were only two examples of words involving deletion: *bird* [bɜ:], and *leg* [le], produced by a Meta-lx group learner and a PLD group learner, respectively.

English words with final fricatives in this test include words that end with /-s/, as in glass [glɑ:s], /-z/ as in nose [noz], /-ʃ/ as in fish [fɪʃ], and /-v/ as in give [gɪv].

Table 5.25: Picture-naming of final fricatives

Subject	No of items	Target %	Deletion %	Unreleased stop %	Sub 1 %	Sub 2 %	Epenthesis %
Control (n=30)	81	1 1.23	0 0.00	78 98.30	2 2.47	0 0.00	0 0.00
Meta lx Group (n = 23)	88	29 32.95	7 7.95	25 28.41	25 28.41	2 2.27	0 0.00
PLD Group (n = 27)	100	21 21.00	66 66.00	30 30.00	30 30.00	12 12.00	1 2.00

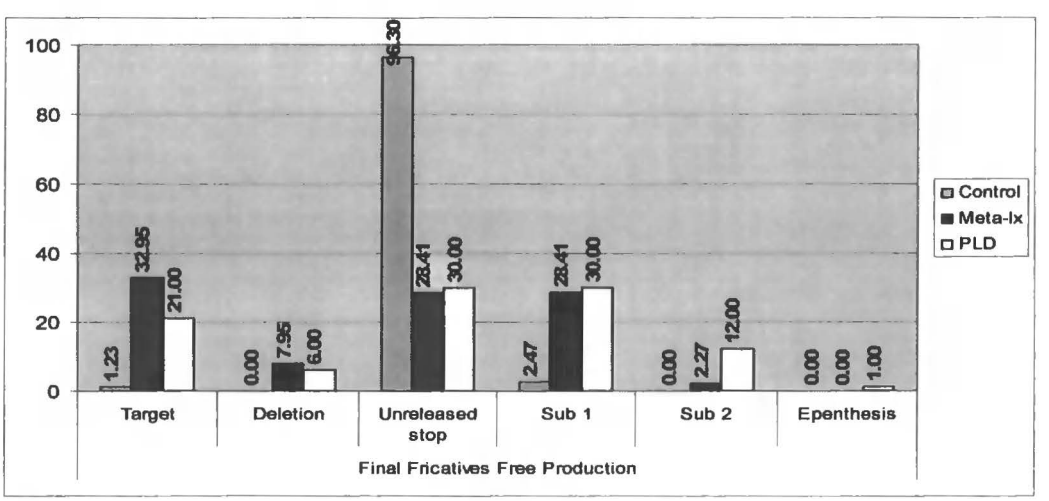

Figure 5.26: Picture-naming of final fricatives

From the table and chart, we see that the control group tended to substitute the final fricative in English words with an unreleased voiceless stop: this is an obvious Thai influence. The two experimental groups also did the same, but with much lower numbers than that of the control group. Examples of this set of word include words like *glass* [gɑ:t˺], *fish* [fɪt˺], and *nose* [no:t˺].

Substitution 1 was when the final fricative in English was substituted with another single consonant. Examples for these words included words like fish [fɪs], which was found in two examples of the word produced by control group learners. The Meta-lx group learners also substituted other consonants for the same fricative /-ʃ/with, for example, [-k] and [-t]. Thus the word *fish* was pronounced as [fɪk] or [fɪt], while the PLD group produced, apart from the mentioned consonants, a consonant [θ] as a substitution for /-ʃ/as seen from one learner with [fɪθ] for *fish*. With respect to final /-v/, substitution made by the Mt-lx group learners and PLD group learners with [-f] as found in a word like *give* ending in voiced /-v/ pronounced as [gi:f], the final /-s/ in *glass* is commonly found to be substituted with [-ʃ]as in [gɑ:ʃ]. The final voiced /-z/ in the word *nose* was found to be difficult to pronounce by learners in all groups and was substituted with [-s], [-t], and [-ʃ] and thus pronounced by learners as [no:s], [no:t], and [no:ʃ].

Another type of substitution- Substitution 2 on the table and figure - was found when a single final fricative was substituted by a set of clusters. One item produced by the Meta-lx group is found when final /-ʃ/ in *fish* was substituted by [-t˺s] clusters and was pronounced as [fɪt˺s]. The PLD group learners have different sets of clusters

in their repertoire which include [-tˀs], [-pˀʃ], [-pˀs], [-bs], and [-fs] for the substitution of final voiced /-v/. Thus the variation of *give* produced by learners in this group includes [giːtˀs], [giːpˀʃ], [giːpˀs], [gɪfs], [gɪpˀs], [giːbs], and [griːfs]. More substitution with clusters produced by this group are also found when final /-ʃ/ in the word *fish* was substituted with [-tθ] and [-ts] when they are pronounced as [fɪtθ], or [fɪts]. The final /-z/ in *nose* was found to be substituted by [-ts] clusters as in [noːts], and final /-s/ in *glass* was substituted by [-ts] as in [glɑːts].

This set of words included rimes with final /n/, /v/, /t/ and /s/ after /ɑɪ/ as in *nine* [nɑɪn], *five* [fɑɪv], *white* [wɑɪt], and *rice* [rɑɪs]. As shown in the table and the figure, not many words produced were target like, especially by the control group. These final rimes are not allowed in Thai, and this seems to be the most difficult sound of all for these L2 learners of English.

Table 5.26: Picture-naming of final /-n/, /-s/, /-t/ and /-v/ after /ai-/.

Subject	No of items	Target %	Deletion %	Substitution %	Epenthesis %
Control (n=30)	176	0 0.00	176 100	0 0.00	0 0.00
Meta lx Group (n = 23)	70	12 17.14	33 47.14	24 34.29	1 1.43
PLD Group (n = 27)	94	8 8.51	54 57.45	32 34.04	0 0.00

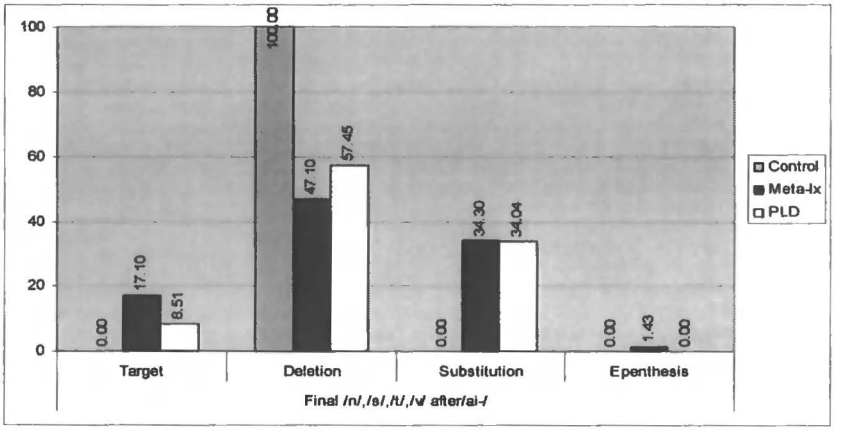

Figure 5.27: Picture-naming of final stops

Deletion is the main strategy applied by all groups. From all three groups, examples of deletion are found in the words *nine* [nɑɪ], *rice* [lɑɪ], *five* [fɑɪ], and *nine* [wɑɪ]. However, substitution is also widely used by the Meta-lx group and the PLD group, but not by the control group. With similar behaviour, learners in these two groups produced similar substitution for the target words ending with this set of rimes. For final /-n/ in *nine*, the substitution is made with [-s] and [-ʃ], thus *nine* was pronounced by learners as [nɑɪs], and [nɑɪʃ]. They also substituted final /-v/ in five with [-f], [-ʃ], and [-s]. The pronunciation of *five* thus becomes [fɑɪf], [fɑɪʃ], or [fɑɪs]. For the word *white* ending in /-t/, the substitution made by learners for /-t/ includes [-s], [-ʃ], and [-tʃ], and in this respect the word *white* was found in variation of pronunciation like [wɑɪs], [wɑɪʃ], or[wɑɪtʃ]. There is one consonant, [-ʃ], found to substitute for final /-s/ in the word *rice* when it was pronounced by one learner as [rɑɪʃ]. One example with epenthesis is found in the word five when one Meta-lx group learner pronounced as [fɑɪfə].

Through the set of words ending in final clusters, the real variations of how our learners of English produce sequences not allowed in Thai are shown to play an intriguing role in their linguistic development. The set of words in this test consists of English words ending in various types of clusters which include /-nd/ as in *hand* [hænd], /-ndʒ/ as in *orange* ['ɒrɪndʒ], /-nk/ as in *pink* [pɪŋk], /-mp/ as in *lamp* [læmp],/-lt/ as in *belt* [belt], /-lk/ as in *milk* [mɪlk], /-ks/ as in *box* [bɔks], *ox* [ɔks], and *six* [sɪks], and /-sk/ as in *desk* [dɛsk].

Table 5.27 : Picture-naming of final clusters

Subject	No of items	Target %	V1 %	V2 %	V3 %	V4 %	V5 %	V6 %	V7 %	V8 %	V9 %	V10 %
Control (n=30)	324	0 0.00	147 45.37	0 0.00	0 0.00	0 0.00	33 10.19	143 44.14	0 0.00	0 0.00	1 0.31	0 0.00
Meta lx Group (n = 23)	172	46 26.74	50 29.07	3 1.74	6 3.49	19 11.05	19 11.05	13 7.56	4 2.33	9 5.23	0 0.00	3 1.74
PLD Group (n = 27)	278	45 16.19	89 32.01	4 1.44	9 3.24	38 13.67	36 12.95	32 11.51	5 1.80	16 5.76	0 0.00	4 1.44

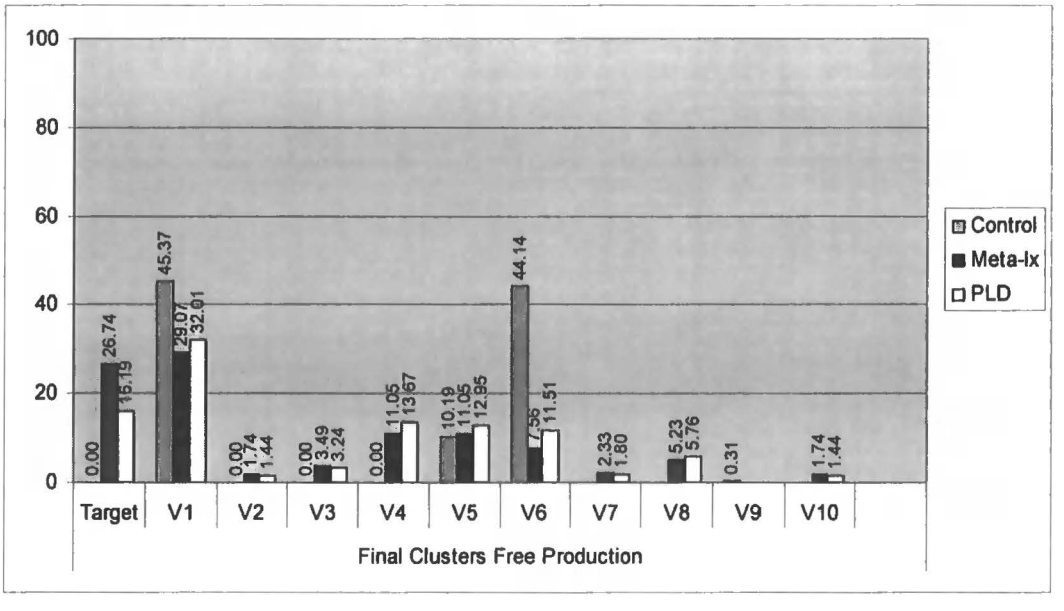

Figure 5.28: Picture-naming of final clusters

On the table and figure each V stands for a different variation of strategy or process in which the target language word was produced by various learners:

V1 refers to the deletion of the second consonant of the final clusters of the words e.g. [sɪk] was produced for [sɪks].

V2 refers to the deletion of the first consonant of the final clusters of the words e.g. [dɛk] was produced for [dɛsk].

V3 refers to the substitution of the fist consonant of the final clusters of the word with a consonant e.g. [mɪwk] for [mɪlk].

V4 refers to the substitution of the second consonant of the final clusters of the word e.g. [pɪŋt] was produced for [pɪŋk].

V5 refers to a substitution of both first and second consonant of the final consonant of the word with one consonant e.g. [bɛw] was produced for[bɛlt].

V6 refers to an undetectable final sound substituted for the final clusters of the word e.g. [dɛkˀ] were produced for [dɛsk].

V7 refers to the substitution of both consonants in the final clusters of the word with different set of clusters e.g. [bɛwʃ] was produced for [bɛlt].

V8 refers to the epenthesis of the second consonant of the final clusters of the word e.g. [læmpə] was produced for[læmp].

V9 refers to the deletion of both consonants of the final clusters of the word e.g. [mɪ] was produced for [mɪlk].

V10 refers to the adding of another consonant to the final clusters of the word e.g. [mɪwʃk] was produced for [mɪlk].

The control group learners do not make use of as many variations in their language production as those learners in the Meta-lx group and the PLD group. In fact the strategies they used seem to be those that are based completely on straightforward transfer from Thai. The way they produced English final clusters tends to rely heavily on both V1 and V6, though these two strategies were also used by the Meta-lx group and PLD group. Through the process of V1, the final clusters in English target words were reduced to a single consonant, the first consonant of the cluster and the one that bears similar characteristics of single consonants that are allowed finally in Thai. As for the V6 procedure in which the final sound of an English word produced is not clearly detected, this could be seen as similar to the word-final voiceless stop in Thai which is produced with an unreleased sound. This can lead to difficulty in detection of what that final sound is. Examples from these two strategies can be seen in words like[ˈoˈlen] for *orange*, [læm] for *lamp*, [pɪŋ] for *pink*, and [hæn] for *hand*, for example, and the other set of words which includes [sɪkˀ] for *six*, [bɔkˀ] for *box*, [dɛ:tˀ] for *desk*, and [ɔkˀ] for *ox*, for example, all which were produced based on the process of V1 and V6, respectively, by learners in all groups.

As another strategy that learners in all three groups employed, V5 looks relatively similar with respect to percentages. It involves the final clusters of target language being substituted with a new consonant. Examples of words that all groups exhibit similar characteristics for is when a /-w/ substituted the final clusters of [-lk] and [-lt],

as in the pronunciation of [mɪw] for *milk*, and [bew]for *belt*. However the two Meta-lx and PLD group learners produced more variations of these two sets of final clusters, /-lk/ and /-lt/, with respect to the V5 process, as [-t] substituted /-lk/ as [mɪt]for *milk*, by Meta-lx group learners and [-k] is used for /-lt/ to pronounce [bæk] for *belt*. In addition, [-s] is used for /-lk/ to produce [maʊs]for *milk*. Both groups also used a single [-ʃ] to substitute a different set of final clusters of /-ndʒ/, /-sk/ and /-ks/, as seen in pronunciations like ['oleʃ] for *orange*, [deʃ] for *desk*, and[ɔ:ʃ] for *ox*. The PLD group learners still produced more variations through the process of V5. They produced [-s] and [-tʃ] to replace /-ndʒ/ in ['ores]and ['owetʃ] (*orange*), [-ʃ] for /-mp/ in [læʃ] (*lamp*).

The rest of the variations are used only by the Meta-lx group and PLD group, but not the control group. Let us look one by one at the variations.

V2 is the process in which the first consonant of the final clusters in English words was deleted by learners in the Meta-lx group and PLD group. Examples from this process are: /-ndʒ/ is deleted into [-dʒ] is found in ['orɪdʒ] (*orange*), a deletion of /-k/ in /-ks/ as in [ɔs](*ox*), and a deletion of /-ŋ/ in /-ŋk/ as in [pɪk] (*pink*).

V3 occurred when the first consonant of the final cluster of target language word was substituted with a different consonant. Words produced by the two experimental groups were words ending with these three sets of final clusters of /-lk/, /-sk/, and /-lt/, the syllable /l/ could be replaced by either [w] or [p]. Examples are seen when

milk was pronounced as[mɪwk], *desk* was pronounces as[depk], and *belt* was pronounces as [bewt].

The process referred to as V4 was applied by learners in the two experimental groups when the second consonant of the final clusters in the English target words were replaced by a new consonant. Among these two groups, the variation for English words ending in /-nd/ as in the word *hand* involved the substitution of the second consonant of the cluster. Examples are seen in the following pronunciations: [hent], [ha:nt∫], [hæn∫], [hæns]. Four variations are found in the final /-ndʒ/ clusters of the word *orange* where it is pronounced as ['owent∫], ['olen∫], ['owenk]. With the word *lamp*, the second consonant /p/of the final clusters of /-mp/ was pronounced in different ways in *lamp* as [læm∫], [læmm], and [læmk]. The consonant /s/, which is the second consonant of the final cluster of /-ks/ in the word *ox* and *box*, was pronounced as [ɔk∫], and [bɔkt∫]. Finally, in the word *pink*, the second consonant /k/ of the final cluster /-ŋk/ was substituted by [∫] thus the pronunciation of the word becomes [pɪŋ∫].

Through the process of V7, both consonants in the final clusters in English words are substituted with a new set of clusters. Examples are seen when the final clusters /-lt/ of the word *belt* were substituted with different sets of clusters like [-w∫], [-wk], [-ws], and [- wt∫]. The variations of the pronunciation of the word thus might be heard as [bæw∫], [bæwk], [bews]and[bewt∫]. The final clusters /-lk/ in *milk* were

replaced by [-wʃ] and became [mɪəwʃ]. And final clusters /-ndʒ/ in *orange* were substituted by [-ŋk] and the word was produced as ['oleŋk].

V8 occurred when the two experimental groups of Thai L2 learners of English employed the strategy of epenthesis to break up the final clusters in English words. Examples are when *lamp* was pronounced as ['læmpə] and ['læmmə], the word *pink* was pronounced as ['pɪŋkə], the word *orange* was pronounced as ['olentʃɪ], the word *belt* was pronounced as ['beltə], and the word *milk* was pronounced as ['mɪlkə].

V9 is a process in which the entire final cluster in English words were deleted. Only one learner, in the control group employed this strategy where the word *hand* was pronounced as [hæ].

Another striking technique employed by learners in the two experimental groups of Meta-lx and PLD was the addition of either an additional consonant to the cluster of even the addition of a second cluster to words with final clusters. The words found as a result of this strategy include [mɪwʃk] as for *milk*, [bewʃk] for *belt*, [hænds] for *hand*, [bɔkts] for *box*, [sɪktθs]for *six*, and [læmps]for *lamp*.

The conclusion can be offered here that the control group and the two experimental group learners performed differently in terms of the strategy they employed and the frequency of that strategy. It looks like the experimental group learners were not just transferring from their native Thai, but that they were sometimes using processes similar to those children learning English follow (Ingram 1989). The control group's

production, however, tends be more influenced by L1 syllable structure than what the two experimental group learners produced. For these two groups, it looks like there is use of the developmental or universal strategies or processes discussed in Chapter 2 such as epenthesis. These strategies result in interlanguage forms which cannot always be directly traced to the learners' Thai or to the target language. They indicate that the learners are behaving more like children learning English as their first language. They are figuring out how English works using the same mechanisms young children learning their first language use. Since these children are still within the critical period, this is not at all unexpected.

5.8 Conclusion

Conclusions can be made as follows:

1. There is evidence that the pronunciation practice materials do the job successfully. The success is confirmed by the fact that both two experimental groups outperformed the control group on both stress and syllable structure; these differences are statistically significant, and most apparent in the picture-naming tasks, where the greatest difference is between the control group who produces no target-like forms and the experimental groups whose production is superior.

2. The two experimental groups benefited very well from the materials; they were both very successful.

3. Acquiring stress showed higher overall target-like rates than syllable structure.

4. The control group were hopeless despite much more English (40 hours more).

5. On the repeat-after-tape tasks which drew on learners' mimicking ability, the control group were actually worse than the other two groups. The results seem to show that the English that they had already got must have had a negative effect on their perception.

6. Between post-test 1 and post-test 2, the experimental groups' scores were maintained, especially for picture-naming. This shows that phonological competence was starting to be established among the experimental groups.

7. Both methods work successfully, though it might be concluded that adding consciousness-raising tasks (Sharwood Smith, 1993) can slightly enhance the effect of getting native speaker input for syllable structure.

With respect to the aim of intelligibility that I discussed in Chapter 1, these methods seem capable of achieving this. Now we turn in Chapter 6 to the implications of this study.

Chapter 6

Implications and future directions

6.0 Introduction

We have seen in the previous chapter that the prepared pronunciation practice materials seem to have been successful in helping young learners, based on the two experimental groups' success with English pronunciation. Before discussing the implications of my results, I will consider issues of reliability and validity. Could there have been factors other than the materials used in the experiment that led to the results?

First, would we get the same results if we ran the test with another group of learners? On this study, the pupils' motivation for language learning might have influenced their success. One of the possible factors that may have increased motivation was listening to children's voices on the tapes. This could have been a factor but I did not specifically examine it. The teacher's (i.e. my) attitudes and expectations might have influenced pupils' behaviour. It is not possible to rule out these factors. I have to also admit that a teacher other than me might not use these materials or might not use them in the same way if s/he was not enthusiastic about them. If the teacher isn't enthusiastic, the pupils will not be either and this will influence their progress. However, from my observation of the control group pupils while not teaching them, their regular teacher seemed to be a lively and positive. When I was teaching them, the control pupils themselves were enthusiastic just about having another teacher and responded positively to whatever I did with them. I was very careful to be as

enthusiastic when teaching the control group as I was when teaching the other two groups.

We must also consider whether the fact that there was no pronunciation lesson at all for the control subjects had an influence on their lack of success. From my observation, the way the control group pupils learned the words was done through pronunciation of each vocabulary item by the teacher and pupils repeated in unison after her. The treatment the PLD group got could also be described as just learning words, even though they were learning them from native speakers on tape rather than from the non-native speaking teacher. As for the Metalinguistic group, the treatment they got could perhaps be described as a pronunciation lesson because the process was carried out through the pupils' interaction with the tape recorded voices and they had additional, consciousness-raising exercises. However, all pupils in all three groups responded to either the teacher or to the tape at the same time. In other words, apart from the consciousness-raising component of the Metalinguistic group's lessons, there was nothing in any of the three types of lessons to single them out as pronunciation lessons.

Second, did the tests just measure what the pupils were taught or did they actually measure their interlanguage phonology? Did the fact that the experimental subjects were tested on the same items they were taught lead to their success? I have implied in Chapter 5 that the input the control group and the two experimental groups got influenced their L2 English phonological systems. We might think of the answer to this question as follows. The results revealed the control group data were similar to the baseline data, and if we can conclude that the baseline data revealed interlanguage

phonology systems, then it seems that the control group pupils were on the way to developing the same Thai-English interlanguage phonological systems. It is true that I could not look at whether they were developing a system or just learning what they had been taught. This is because of the methodology I had to use. The fact that they were all beginning learners, meant that my best option was to test them on words they had learned, and these were words that were part of their normal curriculum. We had to follow the curriculum to avoid disadvantaging them. It is true that one option would have been to give the pupils words on the two post-tests that they had not learned, but this could be done only by an oral imitation/repetition task and this would have just measured their ability to imitate. Note that I actually did do this - on the repeat-after-tape test. This is clearest when I pre-tested the two experimental groups who had not previously exposed to English. What I found was that they were better than the control group, i.e. better than pupils who had been exposed to Thai-accented English for a semester (see results in Chapter 5). I think that the imitating ability of the control group pupils had already been negatively influenced by their Thai-accented input. But an imitation task does not show enough. My only other alternative was to test them on the words and expressions they were meant to be in the process of learning in all three groups, that is, the vocabulary in the national curriculum. It is quite difficult to tell whether the experimental groups' English phonologies were later going to develop differently from the control group's. This would require an extended, longitudinal study. This can be something that future Thai PhD students should consider doing.[9]

[9] Unsolicited anecdotal evidence exists from a teacher in the experimental group school who recently remarked that this cohort of pupils seemed to all be particularly good at English when they left primary school.

Finally, the point might be made that the experimental subjects improved only because they heard native speaker input, not because of any characteristics of the materials. In fact the treatments the Meta lx and the PLD group received were different (see Chpter 5) i.e., one group had consciousness-raising exercises and one group did not, but both share the similarity in that input was from native speakers. The results showed that these groups were better than the control group. And as discussed earlier, in rural Thailand opportunities for exposure to English outside the classroom are quite rare. Furthermore, results from Baseline study show that most of the English produced by Thai learners of English at all levels pointed to non-native phonological proficiency in English with respect to syllable structure and stress. From my observation, it was also found that the English of teachers in the schools in which I collected data seemed to be similar to those individuals tested in the Baseline study. Therefore, it seems that Thai teachers at the time I carried out my study were not in a position to provide near-native input to their pupils.

Input from native speakers can be provided in the classroom, but it has to be input that pupils will listen to. Of course teaching materials that can provide native-speaker input in the primary classroom should be investigated. But we can also explore more uses of the type of materials that I obtained good results for. As I discussed above, the study had some limitations, but we can investigate some of these limitations by developing these materials and extending their use.

Based on the conclusion that the materials used made a difference in the pronunciation of these young learners, we can extend their use. I assume that these materials offer a way to help learners move in the direction of improving their

English pronunciation in terms of their acquisition of English syllable structure and especially primary stress. These are materials that can be brought into real use in the classroom for pronunciation practice in rural Thai ELT classrooms where there is a severe lack of native speaker input. In this chapter, I will discuss how Thai children might further benefit from materials like these.

6.1 How pronunciation practice materials can be interesting to learners and teachers

The type of pronunciation teaching materials used with the metalinguistic group and the primary linguistic data group is quite different from what is currently being used in English classes at the primary level in Thailand. One key difference is the language input in the experimental materials. This input is from native English speakers. If young learners respond well to ready-made materials, this will be helpful for teachers in that they do not have to take on the extra work load of preparing their own materials, especially when it comes to figuring out how to provide native-speaker input in class.

6.1.1. For learners

I pointed out above that materials will be more effective when teachers and pupils are enthusiastic about them. Tape-recorded materials might not be as exciting as a live teacher or as videos, and they might not attract the interest of primary school children with short attention spans. From my observations during the use of these pronunciation teaching materials, the learners in the experimental groups seemed to enjoy the lessons and seemed to be excited and eager to listen to the taped voices of native speakers, especially children of the same age. I observed them paying

attention to these listening-based lessons, and they fully responded to what they were asked to do by the voices on the tape.

Apart from listening to authentic input from persons of a similar age, learners were also expected to interact, in one way or another, with what they were listening to. Despite the official policy of following Communicative Language Teaching (see Chapter 4), this type of interactive lesson is rarely seen in English school classes in Thailand. As the children listened to an introduction to the lesson from the two young native speakers, the pictures of the actual persons, whose voices were heard, were shown. This helped create sense of intimacy that seemed to serve to successfully keep learners' attention.

When new language items were introduced, the pictures or real objects related to what was being learned were shown, rather than a translation of these words into Thai. During language practice, learners simply responded by doing what they were asked to do on the tape. They might have been asked to pronounce the sound of what they had just heard or they might have been asked to write, to tick, or to colour something. Listening to someone of a similar age and responding to what these native speakers were saying might have helped to reduce the gap of both age and distance. Learners will feel as if they are interacting with native speaking children in their own class. The way learners practised their pronunciation seemed therefore to be more natural and more real than that of the traditional teacher-led drills.

6.1.2. For teachers

I led the lessons for the research study, but in reality, if such materials are adopted, classroom teachers will be involved. As noted above, such ready-made lessons immensely help reduce teachers' labour for lesson preparation when they use these lessons to teach pronunciation. Operating these lessons means that the teacher will be more like a moderator than anything else. Teachers will not have to feel embarrassed pronouncing English words in front of the class because everything in relation to English pronunciation has been recorded on ready-to-use cassette tapes. All the teacher has to do is play the tapes. It is expected that teachers will therefore feel more confident in including pronunciation in their classes. The process of language presentation will be easy because all the materials have been provided. These materials would include listening tapes, flash cards, picture cards and work sheets, for example. These materials would be accompanied by instructions, both in Thai and English. In developing the kind of materials used with the experimental groups for real classroom use by teachers, the lessons would also include an introduction of the basic ideas underlying second language acquisition and all the steps for teachers to follow to make their English pronunciation lessons successful. Any teacher should be able to feel certain and confident of achieving success in improving his/her students' pronunciation.

There is evidence that teachers will be interested in using such lessons. When the experimental materials were used with the two experimental groups in the school, the normal English teachers were curious about the materials and expressed an interest in trying to use them. They even asked for the recorded materials that had been used with the experimental groups for their own use in their English classes.

In the above discussion, I have implied that there are lots of ready-made materials. But I have been referring only to the materials which were designed for the experiment. How can these materials be used as an example to develop into additional lessons for real use in primary English classes and beyond in Thailand?

6.2 Curriculum Development

As I mentioned earlier on many occasions, the way English has been taught in Thailand, either at the primary school or secondary school level, does not seem to improve learners pronunciation to the level of near-native speaker. The Baseline study results showed that there is a long way to go before Thai learners of English in general become successful in terms of English pronunciation. The data reveal that across all levels of learners of English, including university students majoring in English, there are problems with English pronunciation for word stress and syllable structure. The reason behind the lack of success was assumed to be non-use of native speaker input in English classes and little access to English possible outside the classroom. This led to the idea of trying something quite different. That 'something different' was providing 'appropriate input' to learners for English pronunciation practice and that 'appropriate input' was from native speakers of English.

It is quite likely that in order to sustain the success we saw for the experimental group learners, such native-speaker input would have to be provided throughout schooling with similar ready-made taped materials. But this may only be required for one generation. By the time the majority of learners have managed to acquire English syllable structure and stress, future primary and secondary English teachers will be

able to provide 'appropriate' input to the next generation without having to rely on input from native speakers on tape. In the meantime, there is a need to provide input from native speakers of English in the classroom in Thailand. These materials should be based on the model established by my study's results.

A point discussed in Chapter 4 is that pronunciation practice is not suggested to be carried out as an independent class; instead, it should be integrated into a normal class when the teacher becomes aware of when pronunciation practice is required by learners (Laroy 1995, Pennington 1996). I find this suggestion quite difficult to apply to the Thai teaching context. In Thailand, if pronunciation practice is the teacher's responsibility and it is not only his/her own decision regarding when to use it but also his/her responsibility to design lessons with the help of relatively complicated guidelines, there is little or no chance that pronunciation practice will be included. As a result, the phonological competence in English of Thai learners will not change and will only lead to the consequence that Thai learners of English remain unintelligible. Pronunciation practice thus needs to be treated in the classroom as something separate from normal English lessons. There should be independent pronunciation practice lessons so that effort is made to put this into practice by Thai teachers.

With ready-prepared pronunciation lessons, pronunciation practice can be more practical, in terms of the learning context where sources of native speakers are rare, or even with teachers whose English accents are far from that of native speakers. Prepared materials can overcome these problems.

For the reasons mentioned above, I have suggested that pronunciation practice needs to be supported as an independent course given in the context of English classes, especially at the primary school level and secondary school level. But how is it possible or practicable in the English curriculum to include pronunciation practice as an independent set course? The suggestions in relation to the curriculum to be made come from what I learned from the preparation of the experimental materials and from the actual implementation of these in the two English classes.

Let us look at practical concerns. I will discuss first how time should be allocated for pronunciation practice and then I will move on to a possible structure for an overall curriculum.

6.2.1 Time allocation for a pronunciation course

In the experimental study, the lessons given to the experimental learners lasted 20 minutes a day, five days a week for four weeks. This resulted in a total of 6 hours and 40 minutes of instruction. And the results showed this was successful. It seems that children do not really need a greater amount of time to start to develop their phonological ability in English.

At the primary school level, as illustrated in Table 6.1 (which repeats Table 4.2 in Chapter 4), learners at the Preparatory Level (Primary 1-Primary 2) and Literacy Level (Primary 3-Primary 4) spend 6 periods a week, and in Beginner Fundamental Level (Primary 5-Primary 6) they spend 15 periods per week on English.

Table 6.1: Structure of English courses for primary school level in Thailand

Proficiency Level	Class Level	Coursework and Time Allocation
1. Preparatory Level	Primary 1- Primary 2	- Preparatory English - 3 terms starting in 2nd term of Primary 1. - 6 periods/week
2. Literacy Level	Primary 3 – Primary 4	- Literacy English - 4 terms - 6 periods/week
3. Beginner Fundamental Level	Primary 5 – Primary 6	- Fundamental English - 4 terms - 15 periods/week

1 period = 20 minutes

I would suggest that learners in Primary 1, until the end of 1st year primary school, should continue with the materials I used with them. The same amount of time, five periods a week, is practical, because the materials include all the vocabulary and the language structures that are in the curriculum for 1st year of primary school level. In other words, this pronunciation practice is actually the only lessons students get or need to get. Once this foundation has been laid, the amount of time for pronunciation practice can be reduced. So in the following years of primary school till the end of primary school level, learners might need only two periods a week to listen to the voices of the native English speakers on tapes and practice their English by responding to what the tapes ask them to do.

At the secondary school level, according to Table 6.2 learners are offered at least four periods a week of English classes. As fundamental knowledge of English phonology

will be laid down at the primary school level, at secondary school level, learners might need only one period for every two weeks to listen to native speakers from recordings and practice their English pronunciation. This allows time to be spent on other skills.

Table 6.2: Structure of English courses for secondary school level in Thailand

Level	Class Level	Coursework and Time Allocation
1. Lower Secondary school level	Secondary School level 1-3	- 4 periods/week of core-course English
	Secondary School level 1-3 Programming in either English-Sciences or English-Mathematics	- 4 periods/week of core-course English and - 2 periods/week extra course of English in Listening-Speaking, and Reading- Speaking
2. Upper Secondary school level	Secondary School level 4-6	- 4 periods/week of core-course English
	Secondary School level 4-6 Programming in either Arts-Languages or Arts-Mathematics	- 4 periods/week of core-course English and - 2 periods/week extra course of English in Listening-Speaking, and Reading- Speaking

1 period = 50 minutes

But these suggestions are based on assuming the foundation at the earliest level of English sufficient. Without a longitudinal study of primary school and secondary school learners, it is not possible to say what the effect would be of reducing the number of hours spent on pronunciation.

6.2.2 Content

The materials used in the experimental study were based on two different two methods, namely:

1. For the metalinguistic group, this was consciousness-raising before the practice started. This included: a) delay of production until the learners are well-informed about the characteristic of the language they are learning and, b) a relaxing atmosphere.

2. For the primary linguistic data group, there was no consciousness-raising. Learners listened to the recordings and responded to the tasks required from the listening. The atmosphere was also relaxing.

Both these methods, however, definitely require 'quality input', i.e. from native speakers, who have been audio tape-recorded.

The results from the experimental study were not conclusive on whether consciousness-raising or just primary linguistic data alone works better. And it is possible that in the long run a non-consciousness-raising approach might be better. This prediction is based on studies that show that older learners (who can be assumed to rely on consciousness-raising processes at least some of the time, see e.g. Sharwood Smith 1993), are better at the start than younger learners (who do not depend much on consciously learned rules), but recall that the younger learners in one study eventually overtook the older learners (Snow and Hoefnagel-Höhle 1978).

The process by which the materials were prepared for the experimental groups involved vocabulary and sentence structures, for example, being selected from the curriculum, in my case from the 1st course of English, i.e. the Preparatory Level, for the primary school level in Thailand. I would suggest for extending these lessons to

all levels by listing the words and structures from the curriculum and then designing interesting and appropriate exercises for that level of learners. These exercises should require learners to listen carefully and then respond. Native speakers of the same age as the Thai learners should be tape-recorded to create the lessons. Exercises which require writing must be avoided at the primary level, until writing in English has been introduced and mastered.

Because learners from both experimental groups, either with or without consciousness-raising, did quite well, if the teachers do not feel comfortable using the metalinguistic exercises that would also be included in the ready-made lessons, they could just play the main part of the lessons, i.e. like those used with the primary linguistic data group. The syllabus can thus be adaptable, for example lessons used with the primary linguistic data group can be added to with the extra exercises that the teacher can do to raise pupils' consciousnesses. If teachers don't do such tasks, the study shows that learners will still do well.

But in order to create a curriculum, there needs to be some guiding points, and the PLD lessons do not provide this. So even though I would personally prefer to use the non-consciousness-raising practice because young learners are well enough equipped to follow the natural processes of language acquisition through simply dealing with primary linguistic data, a curriculum cannot be built around this. It is easier to build the curriculum around specific aspects of supra-segmental phonology if we include consciousness-raising tasks so the teachers can feel they are following a sequence. A possible curriculum would focus on the following aspects of supra-segmental phonology. Segmental phonology could also be included as content in the curriculum,

but because this is beyond the scope of my thesis, I am not including it here. It may turn out that a supra-segmental curriculum is enough, that learners who start young do not need to focus on segmental phonology to develop it. This is an issue for future research.

A possible curriculum would look like this:

Primary School Level

Content:

At the earliest levels, the content will primary stress on words in isolation, consonant clusters, and final consonant sounds, similar to the materials for the PLD group.

Learners' language will be gradually developing from the lowest stage of single words into more complex language as learners string words together into sentences. Therefore at later levels, clusters and final consonants will still be included, secondary stress and unstressed syllables (rhythm) will be introduced, and sentential stress and intonation will also be introduced.

Secondary School Level

Content:

At all stages at the secondary school level, the content of these exercises continues to includes word stress, clusters and final consonant sounds for new words learned, and sentential stress and intonation for new words learned and for new syntactic constructions.

It is important to keep in mind that the phonological aspects to be presented at each stage, either at the primary or secondary school level, should be extracted from the vocabulary and sentence patterns that appear in the national curriculum for each level. It is also important that the materials used are tape-recorded by native speakers of English, if possible by speakers about the same age as the Thai learners, to make sure they stay interested in listening to voices on tape.

As mentioned above several times, Thai teachers will only use ready-made materials; they cannot be expected to extend the experimental lessons designed for my study to a whole pronunciation teaching curriculum. As researcher for this study, I expect to development (and test) these materials

.

6.3 Teacher re-education

Finally, one of the most important issues that needs to be focused on is teachers' preparation and knowledge. Teachers need to be convinced that they can teach pronunciation without modelling it for students and without correcting them; they need to be convinced that when they do that and learners will succeed. To understand this, teachers need at least some exposure to L2 acquisition theory before they start to use the pronunciation curriculum materials. This might be provided in the form of simple information. Articles in relation to L2 acquisition might be introduced to them; these articles could be translated or summarised in Thai. Ideas to be introduced to them might include things like the Critical Period Hypothesis, language input, and phonological development.

In the future, I believe that Thai English learners who leave primary school will be comfortably understood by an English native speaker when they say they want an ['ɔrendʒ].

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Appendix A

TREATMENT 1

Unit 1
Word list: pencil, window, apple, orange

Lesson 1

Time 20 mins

Objective Students assign correct stress syllable to the following vocabulary when pronouncing.

Vocabulary

1. pencil	/Oo//'pensl/
2. apple	/Oo//'æppl/
3. orange	/Oo//'ɒrɪndʒ/

Sub-objective To introduce 'stress pattern' to students (to develop personal and physical awareness of word stress, Laroy,1995: 46-47)

Preparation Prepare a list of words with the same stress pattern.

Materials For the Variation: recordings of pieces of music with different rhythms

Tape Script

1. pencil	/Oo//'pensl/
2. apple	/Oo//'æppl/
3. orange	/Oo//'ɒrɪndʒ/

Presentation

Procedure

1. Brainstorm a number of rhythmic feelings with the class first. Make a list of fields where rhythmic activities occur (for example, music, dance, nature, sports, transport, cooking). Here are some examples of what may come out of the brainstorming.
Nature: a summer breeze, an autumn gale, the waves of the sea, breathing, heartbeats
Sports: riding a horse, rowing a boat, cycling, running, swimming, tennis
Transport: traveling by train, car driving on a road covered with slabs of concrete

2. Ask the learners to sit comfortably, close their eyes, and breathe calmly. Tell them in a quiet voice that you are going to say some words. They should concentrate on the rhythm of the words, not on the meaning, and try to associate in with something personal, maybe from the list made in Step 1. Ask them to complete the second part of a sentence such as 'When I feel the rhythm of those words it is as if.....' or 'The rhythm of these words makes me think of.....'

3. Quietly say the words you have prepared without stopping between them. Repeat the list.

Variation 1 1. Make word stress visible by using your students to make the 'shape' of words. Weakly stressed (unstressed) syllables are represented by a student sitting down, stressed syllables by a student standing up.

2. Draw a big circle (O) for a stressed syllable and a small circle (o) for an unstressed one on the blackboard.

3. Ss participate either variation 1 or 2 when vocabulary from the word list is read.

Lesson 2

Time 20 mins

Tape Script

1. pencil	/Oo//'pensl/
2. apple	/Oo//'æppl/
3. orange	/Oo//'ɒrɪndʒ/

Practice

Revision 1. Ss listen to the list of recorded words from the tape.
2. Make word stress visible by using your students to make the 'shape' of words. Weakly stressed (unstressed) syllables are represented by a student sitting down, stressed syllables by a student standing up.
Or 3. Draw a big circle (O) for a stressed syllable and a small circle (o) for an unstressed one on the blackboard.

Practice 1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.

2. Ss practice pronouncing words from the objects, pictures, or teacher's demonstration, starting with the whole class then individually.

Unit 2

Stress(Oo), (oO)

seven, yellow, window, Sunday, Hello(oO)

Tape Script

- seven
- yellow
- window
- Sunday
- Hello(oO)

Presentation 1. Ss listen to the list of recorded words from the tape.
2. Make word stress visible by using your students to make the 'shape' of words. Weakly stressed (unstressed) syllables are represented by a student sitting down, stressed syllables by a student standing up.
Or 3. Draw a big circle (O) for a stressed syllable and a small circle (o) for an unstressed one on the blackboard.

Practice 1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice
1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures, or teacher's demonstration, starting with the whole class then individually.

Variation 2 1. If your students' name can be 'anglicized' do so, or ask them to choose an English name for themselves. Get them to find the rhythm of their mane for themselves. Get them to find the rhythm of their name and clap its rhythm.

2. Ask them to find English words with the same stress pattern as their name, or as their friends' names.

Ss will practice to pronounce their friends' name with 'Hello' in a more communicative practice.

Unit 3
Initial Cluster
- blue
- clock
- glass

Time 20 minutes

Objective Students are able to pronounce vocabulary from the vocabulary list correctly.

Vocabulary
- blue
- clock
- glass

Sub-objective Students are able to distinguish initial cluster and non-cluster sounds.

Preparation Prepare a list of word which include following pairs of words:
1. boo - blue
2. cock - clock

3. gas - glass

Tape Script

1. boo - blue
2. cock - clock
3. gas - glass
4. blue
5. clock
6. glass

Presentation

Procedure

1. Ask students to sit comfortably and to close their eyes.
2. Tell them you are going to pronounce a sound several times and that they should imagine a colour when they hear it.
3. Pronounce the sound in different ways, with 5 seconds' silence between ach: whisper, shout, whine, repeat it rhythmically a couple of rimes, and prolong it.
4. Ask your class to write down the name of the colour they associate with the sound, and if possible the reason why they feel it has a link with that colour. Ask very learners to use a coloured pencil.
5. If you ere trying to help our students distinguish two sounds, do the same with second one.
6. Put your learners in a circle and ask them to visualize the colour for the sound first, and then to say simple words containing the sound after you.
7. Now they can take the initiative, pronouncing words while still visualizing the colour they associate with the sound.

Lesson 2 (practice)

Tape Script 1

1. boo - blue
2. cock - clock
3. gas - glass

Tape Script 2

1. blue
2. clock
3. glass

Practice

Presentation

1. Ss listen to the list of recorded words from the tape. (Tape Script 1)
2. Make cluster sound visible by using your students to color the cluster sound of words.

Practice 1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

REVISION UNIT

Content
Listening and meaning practice
- apple
- pencil
- orange
- seven
- yellow
- window
- Sunday
- Hello
- blue
- clock
- glass

Unit 4
final /t/
- cat
- eight
- white

Lesson 1

Time 20 minutes

Objective Students are able to pronounce vocabulary from the vocabulary list correctly.

Vocabulary

1. cat
2. eight
3. white

Sub-objective Students are able to distinguish released and unreleased final sounds.

Preparation Prepare a list of word which include following pairs of words:

1. cat (unreleased final sound) vs cat (released final sound)

2. eight (unreleased final sound) vs eight (unreleased final sound)
3. white(unreleased final sound) vs white (unreleased final sound)

Tape Script 1

1. cat (unreleased final sound) vs cat (released final sound)
2. eight (unreleased final sound) vs eight (released final sound)
3. white(unreleased final sound) vs white (released final sound)

Tape Script 2

1. cat (released final sound)
2. eight (released final sound)
3. white(released final sound)

Presentation
Procedure

1. Ask students to sit comfortably and to close their eyes.
2. Tell them you are going to pronounce a sound several times and that they should imagine a colour when they hear it.
3. Pronounce the sound in different ways, with 5 seconds' silence between each: whisper, shout, whine, repeat it rhythmically a couple of rimes, and prolong it.
4. Ask your class to write down the name of the colour they associate with the sound, and if possible the reason why they feel it has a link with that colour. Ask very learners to use a coloured pencil.
5. Put your learners in a circle and ask them to visualize the colour for the sound first, and then to say simple words containing the sound after you.
6. Now they can take the initiative, pronouncing words while still visualizing the colour they associate with the sound.

Lesson 2

Time 20 mins

Practice

Presentation

1. Ss listen to the list of recorded words from the tape. (Tape Script 1)
2. Make word final sound visible by using your students to color the final sound of words.

Practice

1. Ss listen and repeat starting with whole class and later individually. (Tape Script 2)

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Practice pronouncing
Content
- pencil
- apple
- orange
- seven
- yellow
- window
- Sunday
- Hello
- blue
- clock
- glass
- cat
- eight
- white

Unit 5

Stress
- Monday
- Tuesday
- Goodbye
- ice cream

Tape Script
- Monday
- Tuesday
- Goodbye
- ice cream

Presentation

1. Ss listen to the list of recorded words from the tape.
2. Make word stress visible by using your students to make the 'shape' of words. Weakly stressed (unstressed) syllables are represented by a student sitting down, stressed syllables by a student standing up.

Or 3. Draw a big circle (O) for a stressed syllable and a small circle (o) for an unstressed one on the blackboard.

Practice 1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures, or teacher's demonstration, starting with the whole class then individually.

Pronunciation practice
(look at the picture and say)
- pencil

- orange
- yellow
- Sunday
- Hello
- blue
- glass
- cat
- white
- Monday
- Tuesday
- Goodbye
- ice cream

Unit 6
final / k/, /g/
- book
- dog
- pig
- egg
- leg

Tape Script 1

1. book (unreleased final sound) vs book (released final sound)
2. dog (unreleased final sound) vs dog (released final sound)
3. pig (unreleased final sound) vs pig (released final sound)
4. leg (unreleased final sound) vs leg (released final sound)

Tape Script 2
1. book (released final sound)
2. dog (released final sound)
3. pig (released final sound)
2. leg (released final sound)

Practice

Presentation
1. Ss listen to the list of recorded words from the tape.(Tape Script 1)
2. Make word final sound visible by using your students to color the final sound of words.

Practice
1. Ss listen and repeat starting with whole class and later individually. (Tape Script 2)

Meaning presentation and practice
1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Unit 7

final /d/

- bird
- head
- red

Revision of words from previous lessons

(look at the picture and say)

- book
- dog
- pig
- egg
- leg

Tape Script 1

1. bird (unreleased final sound) vs bird (released final sound)
2. head (unreleased final sound) vs head (released final sound)
3. red (unreleased final sound) vs red (released final sound)

Tape Script 2

1. bird (released final sound)
2. head (released final sound)
3. red (released final sound)

Practice

Presentation

1. Ss listen to the list of recorded words from the tape.(Tape Script 1)
2. Make word final sound visible by using your students to color the final sound of words.

Practice

1. Ss listen and repeat starting with whole class and later individually. (Tape Script 2)

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Unit 8

Initial Clusters

- black
- green

Revision words from previous lessons

- apple
- seven
- window
- clock
- eight
- white

- Monday
- Tuesday
- Goodbye
- ice cream

Presentation of new words

Tape Script 1

1. back - black
2. geen - green

Tape Script 2

1. black
2. green

Practice

Presentation

1. Ss listen to the list of recorded words from the tape.(Tape Script 1)
2. Make cluster sound visible by using students to color the cluster sound of words.

Practice

1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Unit 9

Stress (Oo), (Ooo)

- Wednesday
- Thursday
- Saturday(Ooo)

Tape Script

- Wednesday
- Thursday
- Saturday(Ooo)

Revision

- black
- green
- Monday
- Tuesday
- ice cream

Presentation

1. Ss listen to the list of recorded words from the tape.

2. Make word stress visible by using your students to make the 'shape' of words. Weakly stressed (unstressed) syllables are represented by a student sitting down, stressed syllables by a student standing up.

Or 3. Draw a big circle (O) for a stressed syllable and a small circle (o) for an unstressed one on the blackboard.

Practice 1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the pictures starting with the whole class then individually.

Unit 10

final /l/

- pencil
- apple
- ball
- doll

Revision of Previous lesson :

-Wednesday
- Thursday
- Saturday

Presentation of new words :

- pencil
- apple
- ball
- doll

Tape Script 1

1. pencin (unreleased final sound) vs pencil (released final sound)
2. apple (unreleased final sound) vs apple (released final sound)
3. bon (unreleased final sound) vs ball (released final sound)
4. don (unreleased final sound) vs doll (released final sound)

Tape Script 2

1. pencil (released final sound)
2. apple (released final sound)
3. ball (released final sound)
4. doll (released final sound)

Practice

Presentation

1. Ss listen to the list of recorded words from the tape. (Tape Script 1)
2. Make word final sound visible by using your students to color the final sound of words.

Practice 1. Ss listen and repeat starting with whole class and later individually. (Tape Script 2)

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Unit 11

final/sh/,/v /

- fish
- give

Revision of words from the last lesson : - pencil

- apple
- ball
- doll

Presentation of new words

- fish
- give

Tape Script 1

1. fish (unreleased final sound) vs fish (released final sound)
2. give (unreleased final sound) vs give (released final sound)

Tape Script 2 1. pencil (released final sound)
2. apple (released final sound)

Practice

Presentation 1. Ss listen to the list of recorded words from the tape.(Tape Script 1)
2. Make word final sound visible by using students to color the final sound of words.

Practice 1. Ss listen and repeat starting with whole class and later individually. (Tape Script 2)

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Unit 12

Initial clusters

- fly
- flag
- Friday

Revision of words from the last lessons
- Monday
-Wednesday
- Saturday
- ball
- doll
- fish
- give

Presentation of new words:
- fly
- flag
- Friday

Tape Script 1

1. fai - fly
2. fag - flag
3. Faiday - Friday

Tape Script 2

1. fly
2. flag
3. Friday

Practice

Presentation

1. Ss listen to the list of recorded words from the tape.(Tape Script 1)
2. Make cluster sound visible by using your students to color the cluster sound of words.

Practice

1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

REVISION UNIT

Revision I

Look at the picture

Listen and repeat
- pencil
- apple
- orange
- seven
- yellow
- window
- Sunday

- Hello
- blue
- clock
- glass
- cat
- eight
- white
-Monday
- Tuesday
- Goodbye(oO)
- ice cream(Oo)
- book
- dog
- pig
- egg
- leg
- bird
- head
- red
- black
- green
- Wednesday
- Thursday
- Saturday(Ooo)
- pencil
- apple
- ball
- doll
- fish
- give
- fly
- flag
- Friday

Revision II

Pronounce from pictures

- pencil
- apple
- orange
- seven
- yellow
- window
- Sunday
- Hello
- blue
- clock
- glass
- cat

- eight
- white
-Monday
- Tuesday
- Goodbye(oO)
- ice cream(Oo)
- book
- dog
- pig
- egg
- leg
- bird
- head
- red
- black
- green
- Wednesday
- Thursday
- Saturday(Ooo)
- pencil
- apple
- ball
- doll
- fish
- give
- fly
- flag
- Friday

Unit 13

Stress (Oo), (oOo)

- water
- banana(oOo)
- good morning(oOo)

Tape Script

- water
- banana(oOo)
- good morning(oOo)

Revision

- fly
- flag
- Friday

Presentation

1. Ss listen to the list of recorded words from the tape.

2. Make word stress visible by using your students to make the 'shape' of words. Weakly stressed (unstressed) syllables are represented by a student sitting down, stressed syllables by a student standing up.

Or 3. Draw a big circle (O) for a stressed syllable and a small circle (o) for an unstressed one on the blackboard.

Practice 1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the pictures starting with the whole class then individually.

Unit 14

final /s/

- rice
- nose

Revision of words from previous lessons

- fly
- flag
- Friday
- water
- banana(oOo)
- good morning(oOo)

Presentation of new words :

Tape Script 1

1. rice (unreleased final sound) vs rice (released final sound)
2. nose (unreleased final sound) vs nose (released final sound)

Tape Script 2 1. rice (released final sound)
2. nose (released final sound)

Practice

Presentation 1. Ss listen to the list of recorded words from the tape. (Tape Script 1)
2. Make word final sound visible by using students to color the final sound of words.

Practice 1. Ss listen and repeat starting with whole class and later individually. (Tape Script 2)

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Unit 15

final /v, n/ after /ai/

- five
- nine

Revision of words from previous lessons(Oo), (oOo)

- water
- banana(oOo)
- good morning(oOo)
- rice
- nose

Presentation of new words:

- five
- nine

Tape Script 1

1. five (unreleased final sound) vs five (released final sound)
2. nine (unreleased final sound) vs nine (released final sound)

Tape Script 2

1. five (released final sound)
2. nine (released final sound)

Practice

Presentation

1. Ss listen to the list of recorded words from the tape.(Tape Script 1)
2. Make word final sound visible by using your students to color the final sound of words.

Practice

1. Ss listen and repeat starting with whole class and later individually. (Tape Script 2)

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Unit 16

final cluster /-nd/, /-nk/,/-mp/

- hand
- pink
- lamp

Revision of words from previous lessons

- rice
- nose
- five
- nine

Presentation of new words
- hand
- pink
- lamp

Unit 17
Clusters
- three
- **cluster /skr/**
- ice-cream

Revision of words from previous lessons
- five
- nine
- hand
- pink
- lamp

Presentation of new words
- three
- ice-cream

Tape Script 1
1. thee - three
2. ice keem - ice cream

Tape Script 2
1. three
2. ice cream

Practice

Presentation
1. Ss listen to the list of recorded words from the tape. (Tape Script 1)
2. Make cluster sound visible by using your students to color the cluster sound of words.

Practice
1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice
1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Unit 18
Stress
- Friday
- good afternoon(oOoo)

Tape Script

- Friday
- good afternoon(oOoo)

Revision of words from previous lessons

- hand
- pink
- lamp
- three
- ice-cream

Presentation

1. Ss listen to the list of recorded words from the tape.
2. Make word stress visible by using your students to make the 'shape' of words. Weakly stressed (unstressed) syllables are represented by a student sitting down, stressed syllables by a student standing up.

Or 3. Draw a big circle (O) for a stressed syllable and a small circle (o) for an unstressed one on the blackboard.

Practice 1. Ss listen and repeat starting with whole class and later individually.

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the pictures starting with the whole class then individually.

Unit 19

final cluster /-ndz/, /-sk/, /-lk/,/-lt/

- orange
- desk
- milk
- belt

Revision of words from previous lessons

- three
- ice cream
- Friday
- good afternoon

Presentation of new words :

- orange
- desk
- milk
- belt

Tape Script 1

1. orange (unreleased final sound) vs orange (released final sound)
2. desk (unreleased final sound) vs desk (released final sound)
3. milk (unreleased final sound) vs milk (released final sound)
4. belt (unreleased final sound) vs belt (released final sound)

Tape Script 2 1. orange (released final sound)
2. desk (released final sound)
3. milk (released final sound)
4. belt (released final sound)

Practice

Presentation 1. Ss listen to the list of recorded words from the tape. (Tape Script 1)
2. Make word final sound visible by using students to color the final sound of words.

Practice 1. Ss listen and repeat starting with whole class and later individually. (Tape Script 2)

Meaning presentation and practice
1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Unit 20
final cluster /-ks/
- box
- ox
- six

Revision of words from previous lessons : - Friday
- good afternoon
- orange
- desk
- milk
- belt

Presentation of new words :
- box
- ox
- six

Tape Script 1
1. bok (unreleased final sound) vs box (released final sound)
2. ox (unreleased final sound) vs ox (released final sound)
3. sik (unreleased final sound) vs six (released final sound)

Tape Script 2 1. box (released final sound)
2. ox (released final sound)
3. six (released final sound)

Practice

Presentation 1. Ss listen to the list of recorded words from the tape. (Tape Script 1)
2. Make word final sound visible by using students to color the final sound of words.

Practice 1. Ss listen and repeat starting with whole class and later individually. (Tape Script 2)

Meaning presentation and practice

1. The meaning is presented through real objects, pictures, or demonstration or even translation into Thai meaning.
2. Ss practice pronouncing words from the objects, pictures starting with the whole class then individually.

Appendix B

TREATMENT 2

Unit 1
Initial stress(Oo)
- apple
- pencil
- orange

Stages	Christopher	Margaret	Students/Student sheets	Note
Presentation - apple - pencil - orange	Hello, I'm Christopher, Christopher. I'm from England. This is an apple, I like this apple. She likes orange. This is a pencil, my pencil.	 Hello, I'm Margaret, Margaret. I'm also from England. He likes this apple. This is an orange, I like this orange. And this is my pencil.	- Picture of Christopher. - Picture of Margaret. - Picture of the map of the UK - Picture of an apple - Picture of an orange - Picture of a pencil	
Listening practice	apple orange	 apple orange	- Picture of an apple - Picture of an orange	

	pencil	pencil	- Picture of a pencil	
Identify meaning	Apple Tick the orange Pencil	Tick the apple Orange Tick the pencil	- Tick the picture of an apple in the work sheet. - Tick the picture of an orange in the work sheet. - Tick the picture of a pencil in the work sheet.	

Unit 2

Initial and final stress (Oo) and (oO)

- seven
- yellow
- window
- Sunday
- Hello(oO)

Stages	Christopher	Margaret	Students	Note
Presentation - seven - yellow - window - Sunday - Hello(oO)	Hello Margaret. It's Sunday. Sunday, 7 April. This is yellow, I like yellow. It's a window, it's a yellow	Hello Christopher. Today is Sunday. It's Sunday, 7 April. He likes yellow This is the window.	- Picture of a calendar indicating Sunday - Picture of a calendar indicating Sunday, 7 April. - Picture of a yellow sun - Picture of the yellow window (sun shining into window)	

	window	It's a yellow window.		
Listening practice	Sunday seven yellow window Hello	Sunday seven yellow window Hello	- Picture of a calendar indicating Sunday - Picture of number 7 - Picture of yellow color - Picture of a window - Picture of people greeting.	
Identifying meaning	Tick Sunday seven Tick yellow window	Sunday Tick seven yellow Tick window	- Tick the day in the picture of a calendar indicating Sunday. - Tick the picture of number 7 - Tick the picture of yellow color. - Tick the picture of a window in the work sheet.	
Revision from last lesson: - apple - pencil - orange	pencil Tick pencil. orange	Tick apple. pencil Tick orange.	- Ss tick the picture of an apple. - Ss tick the picture of a pencil. - Ss tick the picture of an orange.	

Unit 3

Clusters
- blue
- clock
- glass

Stages	Christopher	Margaret	Students	Note
Revision of last lesson: - seven - yellow - window - Sunday Presentation - blue - clock - glass	Hello Margaret Tick seven. Window Tick Sunday. This is a clock, it's my clock. It's a yellow clock. This is my glass, it's a blue glass.	Hello Christopher. seven Tick window Sunday And this is my clock, it's a blue clock. It's blue. My clock is blue. But my glass is yellow. It's a yellow glass.	- Picture of Christopher - Picture of Margaret - Ss tick the picture of number 7 - Ss tick the picture of a window. - Ss tick Sunday indicated in the calendar. - Picture of a yellow clock. - Picture of a blue clock. - Picture of a blue glass. - Picture of a yellow glass.	
Listening practice	This is a clock. It's a glass.	It's a clock This is a glass.	- Picture of a clock. - Picture of a glass.	

	This is blue.	It's blue.	- Picture of blue sky.	
Identify meaning	Tick the clock. glass Tick the blue clock. A yellow glass. Tick the blue glass. A yellow clock.	clock Tick the glass a blue clock Tick the yellow glass. A blue glass Tick the yellow clock.	- Tick the picture of a clock. - Tick the picture of a glass. - Tick the picture of a blue clock. - Tick the picture of yellow glass. - Tick the picture of blue glass. - Tick the picture of yellow clock	

REVISION UNIT

Content

- apple
- pencil
- orange
- seven
- yellow
- window
- Sunday
- Hello(oO)
- blue
- clock
- glass

Stages	Christopher	Margaret	Students	Note
	a pencil It's an apple It's an orange Seven yellow Sunday Hello blue A clock It's a glass	It's a pencil. An apple An orange seven yellow Sunday Hello blue It's a clock. A glass.	- Picture of a pencil. - Picture of an apple. - Picture of an orange. - Picture of number 7. - Picture of a yellow color. - Picture of a calendar indicating Sunday. - Picture of Christopher and Margaret greeting. - Picture of a blue color. - Picture of a clock. - Picture of a glass.	
Meaning revision	Tick a pencil. An apple Tick an orange. A yellow apple.	pencil Tick an apple An orange Tick a yellow apple.	- Tick the picture of a pencil - Tick the picture of an apple - Tick the picture of an orange. - Tick the picture of a yellow apple.	

	Tick a blue pencil Sunday Seven Tick a window A clock Color the pencil yellow Color the window yellow	 A blue pencil. Tick Sunday. Tick Seven A window Tick a clock Color an apple blue Color an orange yellow. Say 'Hello' to Ajarn.	- Tick the picture of a blue pencil - Tick Sunday in the picture of a calendar - Tick number seven in the picture of a calendar. - Tick the picture of a window - Tick the picture of a clock - SS color the pencil yellow - Ss color an apple blue - Ss color the orange yellow. - Ss color the window yellow. - Ss say 'Hello' to Ajarn.	

Unit 4
final /t/
- cat
- eight
- white

Stages	Christopher	Margaret	Students	Note
Presentation	Hello This a cat.	Hello	- Ss respond. - Ss respond. - The picture of a cat.	

	It's my cat. It's white. My cat is white. It's number eight.	It's a cat. This is white. It's a white cat. This is eight. It's eight.	 - The picture of the white colour. - The picture of the cat which is white. - The picture of number eight.	
Listening practice	It's a cat. It's white. This is eight.	 A cat. This is white. It's number eight.	- The picture of the cat. - The picture of the white colour. - The picture of number eight.	
Identify meaning	Tick a cat. Eight. Tick white.	 A cat Tick eight. White	- Ss tick the picture of the cat. - Ss tick number eight. - Ss tick white.	
Practice pronouncing Content - pencil - apple - orange - seven - yellow - window	Say 'apple'. 'pencil' Say 'orange'. 'seven'	 'apple' Say ' pencil'. 'orange' Say 'seven'	- Ss say 'apple'. - Ss say 'pencil' - Ss say 'orange'. - Ss say 'seven'.	

- Sunday - Hello(oO) - blue - clock - glass - cat - eight - white	Say 'yellow'. 'Sunday' Say 'blue'. 'clock' Say 'glass'. 'cat' Say 'white'	'yellow' Say 'Sunday'. 'blue' Say 'clock' 'glass' Say 'cat'. 'white'	- Ss say 'yellow'. - Ss say 'Sunday'. - Ss say 'blue'. - Ss say 'clock'/ - Ss say 'glass'. - Ss say 'cat'. - Ss say 'white'.	

Unit 5

Inirtial and final stress (Oo), (oO)

- Monday
- Tuesday
- Goodbye(oO)
- ice cream(Oo)

Stages	Christopher	Margaret	Students	Note
	Hello, students Today is Monday	Hello, students It's Monday today.	- Ss respond - Ss respond - Picture of a calendar indicating Monday.	

	It's Tuesday tomorrow. It's Tuesday. And this is my ice-cream. I like ice-cream, too.	Today is Monday. Tomorrow is Tuesday. This is my ice-cream. I like ice-cream.	- Picture of a calendar indicating Tuesday - Picture of an ice-cream.	
	Monday It's Tuesday This is ice cream.	It's Monday Tuesday Ice-cream	- Picture of a calendar indicating Monday. - Picture of a calendar indicating Tuesday. Picture of ice-cream	
	Point at Monday. Tuesday Tick ice cream.	Monday Point at Tuesday. Ice cream	- Ss point at Monday in the calendar. - Ss point at Tuesday in the picture. - Ss tick the picture of ice cream.	
Pronunciation practice (look at the picture and say) - pencil - orange - yellow - Sunday	Say 'pencil' 'orange' Say 'yellow'. 'Sunday'	'pencil' Say 'orange'. 'yellow' Say 'Sunday'	- Ss say 'pencil'. - Ss say 'orange'. - Ss say 'yellow'. - Ss say 'Sunday'.	

- blue - glass - cat - white - Monday - Tuesday - Goodbye - ice cream	Say 'blue'. 'glass' Say 'cat'. 'white' Say 'Monday'. 'Tuesday' Say ' ice-cream'.	 'blue' Say 'glass'. 'cat' Say 'white'. 'Monday' Say 'Tuesday'. 'ice-cream'	- Ss say 'blue'. - Ss say 'glass'. - Ss say 'cat'. - Ss say 'white'. - Ss say 'Monday'. - Ss say 'Tuesday'. - Ss say 'ice-cream'.	
	Goodbye Margaret. Goodbye students	 Goodbye Christopher Goodbye students	 - Ss respond	

Unit 6

final / k/, /g/

- book
- dog
- pig
- egg
- leg

Stages	Christopher	Margaret	Students	Note
Presentation - book	Hello students	 Hello students	- Ss respond. - Ss respond.	

- dog - pig - egg - leg	Hello Margaret It's a book. This is a dog. It's my dog. This is a pig. This is an egg. It's a blue egg. And this is my leg.	Hello Christopher This is a book. It's my book. It's a dog. - It's a pig. - It's a yellow pig. - It's an egg. - This is my leg.	- Picture of a book. - Picture of a dog. - Picture of a pig. - Picture of an egg. - Picture of a leg.	
Meaning and pronunciation practice	Tick the book, and say 'book'. 'dog' Tick the pig and say 'pig'. 'egg' Tick the leg and say 'leg'.	'book' Tick the dog and say 'dog'. 'pig' Tick the egg and say 'egg'. 'leg'	- Ss tick the picture of a book and say 'book'. - Ss tick the picture of a dog and say 'dog'. - Ss tick the picture of a pig and say 'pig'. - Ss tick the picture of an egg and say 'egg'. - Ss tick the picture of a leg and say 'leg'.	
Pronunciation practice - book	Say book	'book' Say 'dog'	- Ss say 'book'. - Ss say 'dog'.	

- dog - pig - egg - leg	'dog' Say 'pig'. 'egg' Say 'leg'	 'pig' Say 'egg'. 'leg'	 - Ss say 'pig'. - Ss say 'egg'. - Ss say 'leg'.	
	Goodbye students. Goodbye Margaret	 Goodbye students. Goodbye Christopher	- Ss respond. - Ss respond.	

Unit 7
final /d/
- bird
- head
- red

Stages	Christopher	Margaret	Students	Note
Revision (look at the picture and say) - book - dog - pig - egg - leg	Hello students Hello Margaret. Say 'book' 'dog' Say 'pig'	 Hello students Hello Christopher. 'book' Say 'dog'	- Ss respond. - Ss respond. - Ss say 'book'. - Ss say 'dog'. - Ss say 'pig'.	

	'egg' Say 'leg'	pig Say 'egg' 'leg'	- Ss say 'egg'. - Ss say 'leg'.	
Presentation - bird - head - red	It's a bird. It's red. It's her head.	This is a bird. A bird. This is red. 'red' This is my head. 'head'	- Picture of a bird. - Picture of the red colour. - Picture of a head.	
Practice	Tick the bird and say 'bird'. 'head' Tick red and say 'red'.	 'bird' Tick the head and say 'head'. 'red'	- Ss tick the picture of a bird and say 'bird'. - Ss tick the picture of a head and say 'head'. - Ss tick the picture of red colour and say 'red'.	
Pronunciation practice	'bird' Say 'red'.	Say 'bird'. 'red' Say 'head'.	- Ss say 'bird'. - Ss say 'red'. - Ss say 'head'.	

	'head'			
	Goodbye	Goodbye	- Ss respond. - Ss respond.	

Unit 8

Clusters
- black
- green

Stages	Christopher	Margaret	Students	Note
Revision of pronunciation - apple - seven - window - clock - eight - white - Monday - Tuesday - Goodbye - ice cream	Hello Tick the apple and say 'apple'. 'seven'. Tick the window and say 'window'. 'clock' Tick eight and say 'eight'.	Hello 'apple' Tick seven and say 'seven'. 'window' Tick the clock and say 'clock'. 'eight' Tick Monday and say 'Monday'.	- Ss respond. - Ss respond. - Ss tick the picture of an apple and say 'apple'. - Ss tick the picture of number seven and say 'seven'. -Ss tick the picture of a window and say 'window'. - Ss tick the picture of a clock and say 'clock'. - Ss tick the picture of number eight and say 'eight'. - Ss tick Monday in the calendar and say 'Monday'.	

	'Monday' Tick Tuesday and say 'Tuesday'. 'ice-cream'	 'Tuesday' Tick ice-cream and say 'ice-cream'.	- Ss tick Tuesday in the calendar and say 'Tuesday'. - Ss tick the picture of ice-cream and say 'ice-cream'.	
Presentation of new words: - black - green	It's black. This is green. This apple is green.	This is black. This window is black. It's green.	- Picture of black. - Picture of a black window. - Picture of green. - Picture of a green apple.	
Meaning and pronunciation practice - black - green	- Tick black and say 'black'. 'green'	 'black' Tick green and say 'green'.	- Ss tick the picture of black colour and say 'black'. - Ss tick the picture of black colour and say 'green'.	
Pronunciation practice	Say 'green' 'black'	 'green' Say 'black'	- Ss say 'green'. - Ss say 'black'.	
	Goodbye	 Goodbye	- Ss respond. - Ss respond.	

Unit 9
Initial stress (Oo), (Ooo)
- Wednesday
- Thursday
- Saturday(Ooo)

Stages	Christopher	Margaret	Students	Note
Revision	Hello Hello Margaret Say 'black'. 'green' Say 'Monday' Tuesday 'ice cream'	Hello Hello Christopher. 'black' Say 'green' 'Monday' Say 'Tuesday'. Say 'ice-cream'.	- Ss respond - Ss respond - Ss say 'black'. - Ss say 'green'. - Ss say 'Monday'. - Ss say 'Tuesday'. - Ss say 'ice cream'.	
Presentation of new words: -Wednesday - Thursday - Saturday(Ooo)	This is Wednesday. 'Wednesday' It's Thursday.	It's Wednesday. This is Thursday. 'Thursday'	- Picture of the calendar indicating Wednesday. - Picture of the calendar indicating Thursday.	

	This is Saturday.	This is Saturday. 'Saturday'.	- Picture of the calendar indicating Saturday.	
Pronunciation practice	Say 'Wednesday'. 'Thursday' Say 'Saturday'.	 'Wednesday' Say 'Thursday'. 'Saturday.	- Ss say Wednesday. - Ss say Thursday. - Ss say 'Saturday'.	
Pronunciation and meaning practice	 'Wednesday' Tick Thursday and say 'Thursday'. 'Saturday' Tick Monday and say 'Monday'. 'Tuesday'	Tick Wednesday and say 'Wednesday'. 'Thursday' Tick Saturday and say 'Saturday'. 'Monday' Tick Tuesday and say 'Tuesday'.	- Ss tick Wednesday in the calendar and say 'Wednesday'. - Ss tick Thursday in the calendar and say 'Thursday'. - Ss tick Saturday in the calendar and say 'Saturday". - Ss tick Monday in the calendar and say 'Monday'. - Ss tick Tuesday in the calendar and say 'Tuesday'.	
	Goodbye	Goodbye	- Ss respond. - Ss respond.	

Unit 10
final /l/
- pencil
- apple

- ball
- doll

Stages	Christopher	Margaret	Students	Note
Revision of Previous lesson : -Wednesday - Thursday - Saturday(Ooo)	Hello Hello Margaret Say 'Wednesday'. 'Thursday' Say 'Saturday'	 Hello Hello Christopher 'Wednesday' Say 'Thursday'. 'Saturday'	- Ss respond - Ss respond - Ss say 'Wednesday'. - Ss say 'Thursday'. - Ss say 'Saturday'.	
Presentation of new words : - pencil - apple - ball - doll	This is a pencil. It's my pencil. It's an apple. This is a ball. It's my ball. It's a doll.	 It's a pencil. This is an apple. It's my apple. It's a ball. This is a doll. It's my doll.	- Picture of a pencil. - Picture of an apple. Picture of a ball. Picture of a doll.	
Pronunciation practice	Say 'pencil'.	 'pencil' Say 'apple'.	Ss say 'pencil'. Ss say 'apple'.	

	'apple' Say 'ball'. 'doll'	 'ball' Say 'doll'.	Ss say 'ball'. Ss say 'doll'.	
Pronunciation and meaning practice	Tick the pencil and say 'pencil'. 'apple' Tick the ball and say 'ball'. 'doll'	 'pencil' Tick the apple and say 'apple'. 'ball' Tick the doll and say 'doll'.	Ss tick the picture of a pencil and say 'pencil'. Ss tick the picture of an apple and say 'apple'. Ss tick the picture of a ball and say 'ball'. Ss tick the picture of a doll and say 'doll'.	
	Goodbye Margaret. Goodbye students.	 Goodbye Christopher. Goodbye students.	 - Ss respond.	

Unit 11

final/sh/,/v /

- fish
- give

Stages	Christopher	Margaret	Students	Note
Revision of		Hello students	Ss respond.	

words from the last lesson : - pencil - apple - ball - doll	Hello students. Hello Margaret. Say 'pencil' 'apple' Say 'ball'. 'doll'	 Hello Christopher. 'pencil' Say 'apple'. 'ball' Say 'doll'.	Ss respond. Ss say 'pencil'. Ss say 'apple'. Ss say 'ball'. Ss say 'doll'.	
Presentation of new words - fish - give	This is a fish. I like this fish. Give me the ball.	 It's a fish. Give the doll. Give me the pencil.	Picture of a fish Picture of Christopher giving Margaret a doll. Picture of Margaret giving Christopher a ball. Picture of Margaret giving Christopher a pencil.	
Pronunciation practice	Say 'fish'. Say 'give'.	 'fish'	Ss say 'fish'. Ss say 'give'.	
Pronunciation and meaning practice	Tick fish and say 'fish'. 'give'	 'fish' Say to your friend 'Give me a pencil'.	Ss tick a picture of a fish and say 'fish.'. Each student gives their friend a pencil after saying 'Give me a pencil'.	

	Goodbye students. Goodbye Margaret.	Goodbye students Goodbye Christopher.	Ss respond. Ss respond.	

Unit 12

Initial clusters
- fly
- flag
- Friday

Stages	Christopher	Margaret	Students	Note
Revision of words from the last lessons - Monday -Wednesday - Saturday - ball - doll - fish - give	Hello Say 'Monday' 'Wednesday' Say 'Saturday'. 'doll' Say 'ball'.	 Hello 'Monday' Say 'Wednesday'. 'Saturday' Say 'doll'. 'ball' Say 'fish'.	- Ss respond. - Ss respond. - Ss say 'Monday'. - Ss say 'Wednesday'. - Ss say 'Saturday'. - Ss say 'doll'. - Ss say 'ball'. - Ss say 'fish'.	

	'fish' Say 'give'.	'give'	- Ss say 'give'.	
Presentation of new words: - fly - flag - Friday	This is a fly. A fly It's a flag. Today is Friday. Friday.	It's a fly. This is a flag. It's a flag of Thailand. It's Friday.	- Picture of a fly. - Picture of a flag. - Picture of a calendar indicating Friday.	
Pronunciation practice	Say 'fly'. 'flag' Say 'Friday'.	'Fly' Say 'flag'. Friday.	- Ss say 'fly'. - Ss say 'flag'. - Ss say 'Friday'.	
Pronunciation and meaning practice	Point at the fly to your friend and say 'fly'. 'flag' Tick Friday and say 'Friday'.	'fly' Show a flag to your friend and say 'flag'	- Ss point at the fly to their friend say 'fly'. - Ss show their friend a flag and say 'flag'. - Ss tick Friday on the calendar and say 'Friday'.	
	Goodbye students.		- Ss respond.	

	Goodbye Margaret.	Goodbye students. Goodbye Christopher.	- Ss respond.	

REVISION UNIT

Stages	Christopher	Margaret	Students	Note
Revision I Look at the picture Listen and repeat - pencil - apple - orange - seven - yellow - window - Sunday - Hello - blue - clock - glass - cat - eight - white -Monday - Tuesday	Say 'pencil'. 'apple' Say 'orange'. 'seven' Say 'yellow'. Say 'window'. 'Sunday' Say 'hello' 'blue' Say 'clock'.	'pencil' Say 'apple' 'orange' Say 'seven'. 'yellow' 'window' Say 'Sunday'. 'hello' Say 'blue'. 'clock'	- Ss say 'pencil'. - Ss say ' apple' - Ss say 'orange '. - Ss say 'seven'. - Ss say 'yellow'. - Ss say 'window'. - Ss say 'Sunday'. - Ss say 'Hello'. - SS say 'blue'. - SS say 'clock'.	Procedure goes on through the last word

- Goodbye(o O) - ice cream(Oo) - book - dog - pig - egg - leg - bird - head - red - black - green - Wednesday - Thursday - Saturday(Oo o) - pencil - apple - ball - doll - fish - give - fly - flag	'glass' Say 'cat'. 'eight' Say 'white'. 'Monday'. Say 'Tuesday'. 'goodbye' Say 'ice cream'. 'book' Say 'dog'. 'pig' Say 'egg'. 'leg' Say 'bird'. 	Say 'glass'. 'cat' Say 'eight'. 'white' Say 'Monday'. 'Tuesday' Say 'goodbye' 'ice cream' Say 'book'. 'dog' Say 'pig'. 'egg' Say 'leg'. 'bird' Say 'head'.	- SS say 'glass'. - SS say 'cat'. - SS say 'eight'. - SS say 'white'. - SS say 'Monday'. - SS say 'Tuesday'. - SS say 'Goodbye'. - SS say 'ice cream'. - SS say 'book'. - SS say 'dog'. - SS say 'pig'. - SS say 'egg'. - SS say 'leg'. - SS say 'bird'. - SS say 'head'.	

- Friday	'head' Say 'red'. 'black' Say 'green'. 'Wednesday' Say 'Thursday'. 'Saturday' 'pencil'. Say 'apple'. 'ball' Say 'doll'. 'fish' Say 'give'. 'fly' Say 'flag'.	'red' Say 'black'. 'green'. Say 'Wednesday'. 'Thursday' Say 'Saturday'. Say 'pencil'. 'apple' Say 'ball'. 'doll' Say 'fish'. 'give' Say 'fly' 'flag'	- SS say 'red' - SS say 'black'. - SS say 'green'. - SS say 'Wednesday'. - SS say 'Thursday'. - SS say 'Saturday'. - SS say 'pencil'. - SS say 'apple'. - SS say 'ball' - SS say 'doll' - SS say 'fish'. - SS say 'give'. - SS say 'fly'. - SS say 'flag'.	

	'Friday'	Say 'Friday'.	- SS say 'Friday'.	
Revision II Pronounce from pictures - pencil - apple - orange - seven - yellow - window - Sunday - Hello - blue - clock - glass - cat - eight - white -Monday - Tuesday - Goodbye(oO) - ice cream(Oo) - book - dog - pig - egg	- pencil - orange - yellow - Sunday - blue - glass - eight -Monday - Goodbye - book - pig - leg - head	Look at the picture and say it to your friend. - apple - seven - window - Hello - clock - cat - white - Tuesday - ice cream - dog - egg - bird	- Ss say 'pencil' from the picture of the pencil.	The procedure goes on through the last word.

- leg - bird - head - red - black - green - Wednesday - Thursday - Saturday(Ooo) - pencil - apple - ball - doll - fish - give - fly - flag - Friday	- black - Wednesday - Saturday - apple - doll - give - flag	- red - green - Thursday - pencil - ball - fish - fly - Friday		

Unit 13

Stresses

- water
- banana(oOo)
- good morning(oOo)

Stages	Christopher	Margaret	Students	Note

Presentation	Hello Good morning, Margaret. It's water. And this is my banana.	 Hello Good morning, Christopher. This is water. Water This is my banana, I like bananas.	- Ss respond. - Ss respond. - Picture of Christopher and Margaret greeting. - Picture of water. - Picture of a banana.	
Pronunciation practice	Say 'Good morning' to your friend. 'Water' 'banana'	 'Good morning' Say 'water'. Say 'banana'.	- Ss say 'Good morning' - Ss say 'water'. - Ss say 'banana'.	
	Say 'Good morning' to your friend. 'water' Tick banana and say 'banana' to your friend.	 'Good morning' Tick water and say 'water to your friend. 'banana'	- Ss say 'Good morning' to their friend. - Ss tick the picture of water and say 'water' to their friend. - Ss tick the picture of banana and say 'banana' to their friend.	
	Look at the picture and say it to your friend.	 'water'	- Ss look at the picture of water and say 'water' to their friend. - Ss look at the picture of banana and say	

	'banana'	'Good morning'	'banana' to their friend. - Ss look at the picture of people greeting and say 'Good morning' to their friend.	
	Goodbye	Goodbye	- Ss respond. - Ss respond.	

Unit 14
final /s/
- rice
- nose

Stages	Christopher	Margaret	Students	Note
Revision of words from previous lessons - fly - flag - Friday - water - banana(oOo) - good morning(oOo)	Hello Good morning, Margaret. 'fly' Say 'flag'. 'Friday' Say 'water'.	Hello Good morning, Christopher. Say 'fly'. 'flag' Say 'Friday'. 'water' Say 'banana'.	- Ss respond. - Ss respond. - Presenting the picture of a fly to ss. - Presenting the picture of a flag to ss. - Presenting the picture of a calendar indicating Friday on it to ss. - Presenting the picture of water to ss. - Presenting the picture of a banana to ss.	

	'banana' Say 'good morning'.	'good morning'	- Picture of Christopher and Margaret greeting.	
Presentation of new words : - rice - nose	This is rice. I like rice. And this is my nose. Nose	It's rice. I like rice, too. This is my nose. Nose	- Picture rice. - Picture of Margaret pointing at her nose. - Picture of Christopher pointing at his nose.	
Pronunciation practice	'rice' Say 'nose'.	Say 'rice'. 'nose'.	- Ss say 'rice'. - Ss say 'nose'.	
Pronunciation and meaning practice	Point at rice and say 'rice'. 'nose'.	'rice' Point at your nose and say 'nose' to your friend.	- Ss point at the picture of rice and say 'rice'. - Ss pointing at their nose and say 'nose' to their friend.	
	Goodbye	Goodbye	- Ss respond. - Ss respond.	

Unit 15
final /v, n/ after /ai/

- five
- nine

Stages	Christopher	Margaret	Students	Note
Revision of words from previous lessons(Oo), (oOo) - water - banana(oOo) - good morning(oOo) - rice - nose	Good morning. Good morning, Margaret. Say 'water'. 'banana' Say 'good morning' to your friends. 'rice' Say 'nose'.	Good morning. Good morning, Christopher. 'water' Say 'banana' 'good morning' Say 'rice'. 'nose'	- Ss respond. - Ss respond. - Ss say 'water'. - Ss say 'banana'. - Ss say 'good morning' to their friends. - Ss say 'rice'. - Ss say 'nose'	
Presentation of new words : - five - nine	This is five. Yes, it's five. It's nine.	It's five. This is nine. Yes, it's nine.	- Picture of number five. - Picture of number nine.	
Pronunciation practice	Say 'five'. 'nine'	'five' Say 'nine'	- Ss say 'five'	

Meaning and pronunciation practice	Point at five and say 'five' to your friend. 'nine'	'five' Point at nine and say 'nine' to your friend.	- Ss point at number five and say 'five' to their friend. - Ss point at number nine and say 'nine' to their friend.	
	Goodbye	Goodbye	- Ss respond. -Ss respond.	

Unit 16

final cluster /-nd/, /-nk/,/-mp/

- hand
- pink
- lamp

Stages	Christopher	Margaret	Students	Note
Revision of words from previous lessons - rice - nose - five - nine	Good morning Good morning, Margaret Say 'rice'. 'nose' Say 'five'. 'nine'	Good morning Good morning, Christopher 'rice' Say 'nose'. 'five' Say 'nine'.	- Ss respond. - Ss respond. - Ss say 'rice'. - Ss say 'nose'. - Ss say 'five'. - Ss say 'nine.	

Presentation of new words - hand - pink - lamp	This is a hand. It's my hand. It's pink. This is a lamp, it's my lamp	 This is a hand, it's my hand. This is pink. And this is my lamp, it's a pink lamp. My lamp is pink.	- Picture of Christopher's hand. - Picture of Margaret's hand. - Picture of pink colour. - Picture of Christopher's a lamp. - Picture of Margaret which is pink.	
Pronunciation practice	Say 'hand'. 'pink' Say 'lamp'.	 'hand' Say 'pink'. 'lamp'	- Ss say 'hand'. - Ss say 'pink'. - Ss say 'lamp'.	
Meaning and pronunciation practice	Show your friend your hand and say 'hand'. 'pink' Tick lamp and say 'lamp'.	 'hand' Tick pink and say 'pink'.	- Ss show their friend their hand and say 'hand'. - Ss tick the picture with pink colour and say 'pink'. - Ss tick the picture of a lamp and say 'lamp'.	
	 Goodbye	Goodbye	- Ss respond - Ss respond.	

Unit 17
Clusters
- three

- cluster /skr/
- ice-cream

Stages	Christopher	Margaret	Students	Note
Revision of words from previous lessons - five - nine - hand - pink - lamp	Good morning Good morning, Margaret. 'five' Say 'nine'. 'hand' Say pink. 'lamp'	 Good morning Good morning, Christopher. Say 'five'. 'nine' Say 'hand'. 'pink' Say 'lamp'.	- Ss respond. - Ss respond. - Ss say 'five'. - Ss say 'nine'. - Ss say 'hand'. - Ss say 'pink'. - Ss say 'lamp'.	
Presentation of new words - three - ice-cream	This is three. Three This is ice cream.	It's three It's ice cream, I like ice cream.	- Picture of number three. - Picture of ice cream.	
Pronunciation practice	Say 'three'. 'ice cream'	'three' Say 'ice cream'	- Ss say 'three'. - Ss say 'ice cream'.	
Meaning and pronunciation	Tick three and say three.	'three'	- Ss tick number three and say 'three'.	

practice		Tick ice cream and 'ice cream'.	- Ss tick the picture of ice cream and say 'ice cream'.	
	Goodbye	Goodbye	- Ss respond. - Ss respond	

Unit 18

Stress
- Friday
- good afternoon(oOoo)

Stages	Christopher	Margaret	Students	Note
Revision of words from previous lessons - hand - pink - lamp - three - ice-cream	Hello Good afternoon, Margaret 'hand' Say 'pink'. 'lamp' Say 'three'. 'ice cream'	 Hello Good afternoon, Christopher. Say 'hand' 'pink' Say 'lamp' 'three' Say 'ice cream'.	- Ss respond. - Ss respond. - Ss say 'hand'. - Ss say 'pink'. - Ss say 'lamp'. - Ss say 'three'. - Ss say 'ice cream'.	
Presentation of new words (Oo), (oOoo)	Today is Friday. 'Friday' Good afternoon, Margaret.	 It's Friday.	- Picture of a calendar indicating Friday. - Picture of Christopher and Margaret	

- Friday - good afternoon		Good afternoon, Christopher.	greeting.	
Pronunciation practice	Say 'Friday' 'good afternoon'	 'Friday' Say 'good afternoon'.	- Ss say 'Friday'. - Ss say 'good afternoon'.	
Meaning and pronunciation practice	Tick Friday and say 'Friday'. 'good afternoon'	 'Friday' Say 'good afternoon' to your friend.	- Ss tick Friday in the calendar and say 'Friday'. - Ss say 'good afternoon' to their friend.	

Unit 19

final cluster /-ndz/, /-sk/, /-lk/,/-lt/

- orange
- desk
- milk
- belt

Stages	Christopher	Margaret	Students	Note
Revision of words from previous lessons - three - ice cream	Good afternoon Good afternoon, Margaret.	 Good afternoon Good afternoon, Christopher. Say 'three'	- Ss respond. - Ss respond. - Ss say 'three'.	

- Friday - good afternoon	'three' Say 'ice cream'. 'good afternoon'	 'ice cream' Say 'good afternoon'.	- Ss say 'ice cream'. - Ss say 'good afternoon'.	
Presentation of new words : - orange - desk - milk - belt	This is an orange. It's my orange. This is a desk. It's your desk. It's your milk. It's a white belt.	It's an orange. It's my desk. This is a pink desk. This is milk. I like milk. This is a belt. It's my belt.	- Picture of an orange. - Picture of a desk. Picture of milk. - Picture of a belt.	
Pronunciation practice	Say 'orange'. 'desk' Say 'milk'	'orange' Say 'desk'. 'milk'	- Ss say 'orange'. - Ss say 'desk'. - Ss say 'milk'.	
Meaning and pronunciation practice	Point at an orange say 'orange'.	'orange' Point at a desk and say 'desk'.	- Ss point at the picture of an orange and say 'orange'. - Ss point at the picture of a desk and say	

	'desk'		'desk'.	
	Goodbye	Goodbye	- Ss respond	

Unit 20
final cluster /-ks/
- box
- ox
- six

Stages	Christopher	Margaret	Students	Note
Revision of words from previous lessons : - Friday - good afternoon - orange - desk - milk - belt	Good afternoon. Good afternoon, Margaret. Say 'Friday'. 'good afternoon'. Say 'orange'. 'desk' Say 'milk'. 'belt'	Good afternoon. Good afternoon, Christopher. 'Friday' Say 'good afternoon'. 'orange' Say 'desk'. 'milk' Say 'belt'.	- Ss respond. - Ss respond. - Ss say 'Friday'. - Ss say 'good afternoon'. - Ss say 'orange'. - Ss say 'desk'. - Ss say 'milk'. - Ss say 'belt'	

Presentation of new words : - box - ox - six	It's a box. It's an ox. This is six. 'six'	This is a box. It's a blue box. This is an ox. It's a white ox. It's six.	- Picture of a box. - Picture of an ox. - Picture of number six.	
Pronunciation practice	Say 'box'. 'ox' Say 'six'.	'box' Say 'ox' 'six'	- Ss say 'box'. - Ss say 'ox'. - Ss say 'six'.	
Meaning and pronunciation practice	'box' Point at an ox and say 'ox'. 'six'	Point at a box and say 'box'. 'ox' Point at six and say 'six'.	- Ss point at a box and say 'box'. - Ss point at an ox and say 'ox'. - Ss point at six and say 'six'.	

Appendix C

An example of a classroom activity for the control group

Activity 7
Good morning

Objectives

1. Learners are expected to pronounce the word 'Good morning' correctly.
2. Learners are expected be able to greet others correctly when meeting them in the morning.

Content

Greetings with 'Good morning'

Activities

1. Teacher greets learners in class with 'Good morning'.
2. Teacher puts a set of four pictures showing a story about a 'chicken family' on the blackboard.
3. Pointing to the first picture, the teacher tells learners that the mother hen comes in to wake her little chic up at 6 o'clock in the morning. When the little chic drowsily opens her eyes the mother hen says 'Good morning'. Her little chick does not get up but continues with her sleep.
4. Pointing to the second picture the teacher tells learners that at 8 o'clock the father chicken comes in to wake the little one again. When the little one wakes up the father chicken greets her with 'Good morning'.
5. Pointing to the third picture, the teacher continues with the story that after getting up the little one goes out seeking for food with her mother hen. At ten, they meet a puppy; the little chick greets the puppy with 'Good morning' and continues seeking food.
6. The teacher continues with the story in picture four telling learners that the little chick goes on seeking for food with her mother until 1 p.m. and the weather becomes warmer so they both return home. On the way back they meet a little kitten who is laying down on the ground, the little chick greets the kitten with the same 'Good morning'. Both the kitten and the mother hen express the feelings of astonishment on their faces.
7. The teacher explains more in detail how the little chick says the greeting 'Good morning' on different occasions with whom and when and why the little kitten becomes astonished when the little chick says 'Good morning'.
8. The teacher encourages learners to greet the one sitting next to him/her with 'Good morning'.
9. The teacher says 'Good morning' to learners one by one and to 6-7 learners also asking each learner to respond with 'Good morning'.
10. The teacher asks pairs of learners to volunteer to come out to demonstrate with the greeting 'Good morning' to each other. The process continues with more 5-6 pairs. The teacher corrects the mispronunciation when they occur.
11. The teacher asks learners to paint the pictures of the story in for their exercise.

Teaching material

1. A set of story pictures on 'A chicken family'
2. Practice exercise 1.

Evaluation

1. Check if the pronunciation is correct.
2. Check if the greeting 'Good morning' is used for the correct occasions (time).

It is noted that there are no directions to the teacher about trying to tell the story in English. The teacher speaks in Thai except for saying the words for the lesson.

This activity is translated from Ministry of Education, Academic Division (1966) *A Handbook for Teaching English. Activities for First Year Primary School Learners.* Kurusabha Printing: Bangkok. (pp18-19).

Appendix D

Guidance to English Teaching to 1st Year Primary School Students

Pronunciation

a	[ə]
an	[æn, ən]
apple	['æpl]
ball	[bɔ:l]
banana	[bə'nɑ:nə]
big	[big]
bird	[bɜ:d]
blue	[blu:]
book	[buk]
cat	[kæt]
chair	[tʃɛə]
desk	[desk]
do	[dou]
dog	[dɔg]
doll	[dɔl]
door	[dɔ:, dɔə], [dɔ:(r)]
ear	[iə]
egg	[eg]
eight	[eɪt]
eleven	[ɪ'levn]
eye	[ai]
fish	[fɪʃ]
five	[faɪv]
four	[fɔ:(r), fɔə]
Friday	['fraɪdɪ]
goodbye	[gud'baɪ]
good morning	[gud'mɔnɪŋ]
goodnight	[gud'naɪt]
green	[gri:n]
hand	[hænd]
head	[hed]
Hello	['hʌ'lou], [hə'ləu]
Hi	[hai]
ice-cream	[aɪs'kri:m]
in	[in]

mango	['mæŋgəʊ]
may	[meɪ]
milk	[mɪlk]
Monday	['mʌndɪ]
nine	[naɪn]
no	[nəʊ]
nose	[nəʊz]
on	[ɔn]
one	[wʌn]
open	['əʊpən]
orange	['ɒrɪndʒ]
pen	[pen]
pencil	['pensl]
pineapple	['paɪnæpl]
pig	[pɪg]
please	[pli:z]
red	[red]
rice	[raɪs]
Saturday	['sætədɪ]
seven	['sevn]
six	[sɪk]
Sunday	['sʌndɪ]
small	[smɔ:l]
sorry	['sɔrɪ]
table	['teɪbl]
ten	[ten]
that	[ðæt]
the	[ðə, before vowels ði(:)]
thirteen	[θɜ:ti:n]
this	[ðɪs]
three	[θri:]
Thursday	['θɜ:zdɪ]
Tuesday	['tju:zdɪ]
two	[tu:]
under	['ʌndə]
Wednesday	['wenzdɪ]
window	['wɪndəʊ]
water	['wɔtə(r)]
yellow	['yeləʊ]
yes	[yes]

Sentences and Phrases

Hello, I am.....
Hello, I am.....
Good morning.
Good afternoon.
Goodbye.
Bye-bye.
This is.....
This is.....
That's.....
What's your name?
My name is.....
This is a.....
That is a.....
Thank you.
You're welcome.
Please walk.
Please run.
Please walk to the.....
Please run to the.....
Give me a.....
Give me a....., please.
Please give me a.....
What is this/that?
What's this/that?
It's a/an.....
Excuse me.
May I go out / come in , please?
Is it a/an.....?
Yes./No.
Is it a / an.....or a/an
It's a/an.....
It's.....
How many?
Sorry
That's all right.
It's in/on/under the.....
Where is the.....?
It's a big / small + (noun).

Classroom Language

Greetings and Good-byes
Hi
Hello
Good morning
Good afternoon
Goodbye
See you again.
See you tomorrow.
See you on Monday.

Asking permission
Sorry
I'm sorry.
Excuse me.
May I come in, please?
May I go out, please?
Yes, you may.
No, you may not.

Compliments
Good.
Very good.
That's good.
Excellent.
Nice work.
That's right.
That's correct.
All right.

General Classroom Expressions
Thanks
Thank you.
Thank you very much.
You're welcome.
Stand up. (Please sand up./ Stand up, please.)
Sit down. (Please sit down./ Sit down, please)
Quiet.
Be quiet.
Be quiet, please.
Come here, please.
Ready.
Are you ready?
Say it again.
Say this after me.
Repeat after me.
Speak clearly.
I can't understand you.
Look and listen.
Listen to me.
Listen and repeat.
Listen carefully.
Any questions?
Do you understand?
Let's begin.
Raise your hands.
Hands down.
Find a partner.
Break into groups of 3. (4,5....)
All together.
One by one