

## **CHAPTER II**

### **LITERATURE REVIEW AND RELATED STUDIES**

This study focused on the development of musical computer-assisted pronunciation practices. This section reviewed previous theories and studies. It is been divided into six parts: pronunciation, the use of music, computer-assisted language learning, Moodle and the use of Moodle, autonomous learning, and related studies.

#### **1. Pronunciation**

##### **1.1 Teaching Pronunciation**

Pronunciation is the way of making the speech sounds of words and learning how to produce the sounds of a language. Some sounds in any given language are different from sounds in another given language and the way muscles are used to produce these sounds are also different (Lakorn, 2005). However, teaching pronunciation in the language classroom has been a much discussed issue (Otlowski, 1998) because some researchers have stated that language teachers should pay less attention to teaching pronunciation. On the other hand, some researchers have argued that we should teach pronunciation to language learners (Lambercher, 1996, Otlowski, 1998, Celce-Murcia, Brinton & Goodwin, 1996). Nevertheless, pronunciation is a key aspect of listening and speaking skills for language learners.

The goal of teaching pronunciation can vary, from producing a simply intelligible pronunciation to producing a native-like pronunciation (Lambarcher, 1996, Morley, 1991). There are two reasons for teaching pronunciation in the classroom (Poedjosoedarmo, 2004). The first reason is to promote greater intelligibility in a second language and the second reason is to acquire a higher level of education in second language learning.

Teaching pronunciation is divided into two areas: segmentals and suprasegmentals. Segmentals describe the individual sounds of a word; its vowels and consonants (Celce-Murcia et al., 1996, Thompson & Gaddes., 2004, Ladefoged,

2006). Segmentals are taught in order to produce the correct articulation and to reduce the mispronunciations in the audio-lingual approach (Lambacher, 1996).

Following are examples of the segmental aspect.

**Consonants:** “Consonant sounds are produced by obstructing the air flow as it comes up from the lungs” (Finch, 2005). Consonant sounds are divided as voiced or voiceless sounds. Voiced sounds are produced by using the vocal cords (such as /b, d, g, v, or z). Voiceless sounds are produced by not using vocal cords or the vocal cords do not have the vibration (such as /p, t, k, or f/) (Hudson, 2000)

**Vowels:** “Vowels sounds are produced as the air flows without obstruction” (Finch, 2005). The vowel sounds are divided into monophthongs, which are single sounds, such as /I/ sound in word “bid”, and diphthongs, which glide between vowel positions.

During communicative language teaching, pronunciation teaching is focused on suprasegmentals, which describe the rhythm, stress, prominence and intonation of a word (Celce-Murcia et al., 1996, Thompson & Gaddes., 2004).

Following are examples of suprasegmentals.

**Rhythm:** Rhythm of the language of time pattern of syllables (Wong, 1987).

**Stress:** A stressed syllable is a syllable that is pronounced with greater energy and uses more muscular energy, and perhaps increases in pitch.

**Pitch:** Pitch is the tone on a scale going from low to high.

**Intonation:** Intonation is pitch pattern in the sentence (Ladefoged, 2006).

## 1.2 Teaching Suprasegmentals

Suprasegmentals can be taught for adult learners in order to achieve intelligible pronunciation (Thompson. & Gaddes., 2004). Researchers have argued that suprasegmentals should teach before segmentals (Celce-Murcia et al., 1996, Gilbert, 2003). The study of Drewing, Munro, and Wiebe (1998) separated students into two groups. The first group was taught only segmentals. The second group was taught suprasegmentals. They found that the second group, which had learned only suprasegmentals, made larger improvements in comprehensibility than the group who

learned segmentals. Suprasegmentals are easier for second language learners to understand.

Suprasegmentals are also called prosody or prosody phonology. Kreidler (1989) stated that prosody consisted of the utterance divided into rhythm, stress, pitch, chunks or tone units (Halliday, 1967). The tone unit describes the accent or tonicity (Halliday, 1967), as well as intonation or “language melody” (Halliday, 1967).

To sum up, non-native English learners have to understand suprasegmental features to reduce misunderstanding (Lambacher, 1996, Esling & Wong, 1983). Therefore, suprasegmentals should be taught to adult learners in order to achieve intelligible pronunciation (Thompson & Gaddes, 2004). This study focused on creating a lesson that teaches suprasegmentals by examining word stress, sentence stress and intonation. Furthermore, this study focused on using music to encourage learners in a positive atmosphere.

### **1.3 Factors Affecting Learning Pronunciation**

There are many factors that are keys to success for language learners. In learning pronunciation the most influential factors are the learners’ motivation and age.

#### **1.3.1 Motivation**

Motivation is one of the most important factors that affects second language learning. Motivation is the key to stimulating learners to response. In other words, motivation refers to the learners’ needs and interests. Fischler, J. (2007) pointed out that each student has a different level of motivation. Brown (1981 cited in Ellis, 1991) stated that there are three kinds of motivation: global motivation, situational motivation and task motivation. Similarly, Gardner and Lambert (1972 cited in Ellis, 1990; Cohen and Dornyei, 2002) mentioned that motivation can be divided into two kinds: integrative motivation (the desire to be a part of the language community) and instrumental motivation (an interest in academic achievement).

Second language teachers can use motivation to help their learners improve their language ability. For learning second language pronunciation, language teachers can motivate their learners by explaining the importance of good

pronunciation on effective communication. The main focus is not native-like pronunciation, but it is intelligible pronunciation.

In addition, Folioni (1993) found that music can be used in second language classes to motivate the language learner to learn. Murphy (1987) showed that music and songs have a strong power to motivate learners. Music and songs can be added to second language classes to inspire learners to become familiar with the target language. So, in this study, music and songs were used to motivate learners to acquire an understanding of suprasegmentals.

### 1.3.2 Age

Age is one of the factors that affect learning language, as has been demonstrated by many researchers since the Critical Period Hypothesis (CPH) was created by Lennerberg in 1967. The CPH theory believes that before puberty, language learners can acquire native-like pronunciation. On the other hand, adult learners can still learn to pronounce correctly if the teacher focuses on teaching both segmentals and suprasegmentals. Language learners who under the age of twelve could learn native speaker sounds more naturally than adults (Thompson, & Gaddes, 2004). When teaching pronunciation to adult learners, they have a difficult time approaching native-like pronunciation. Adult learners can learn pronunciation with the goal of intelligible pronunciation (Morley, 1991). In communicative language learning, adult learners also learn to speak well if the instructors pay attention to “segmentals”, which are the individual sounds. Improvement in segmentals will motivate learners to learn. Moreover, adults can be taught suprasegmentals, which consist of language stress, rhythm, intonation, pitch, duration and loudness. Intonation rules can be learned like grammar. Teachers should help their learners by starting with the musical aspect of pronunciation. Then, they should teach the stress patterns.

On the other hand, many researchers have found that adult learners can improve both the segmental and suprasegmental areas of their pronunciation. The strategies for helping them are self-monitoring (the conscious action of listening to one’s own speech in order to find errors) and self-correction (the process of fixing one’s errors after they have occurred by repeating the word or phrase correctly).

This study studied how to teach suprasegmentals for adult learners through the use of music in order to help non-native English speakers acquire English suprasegmentals in a suitable atmosphere. Consequently, music and songs were used as a means to help adult learners to acquire proper stress and intonation easily.

#### **1.4 Pronunciation Problems in Thai Learners**

In a real world situation, English is a communicative language. Therefore, pronunciation is the key to success in speaking skills improvement. In Thailand, the results from previous studies revealed that Thai learners had some difficulties in English stress, juncture and pitches, although they often master all of English's sounds (Krutrachue 1960). Wei and Zhou (2002) found that Thai learners had difficulty pronouncing the words with consonants, consonant clusters, word with /ei/, words with /r/, words with /v/, and words with /z/. Thai learners also had problems with word stress and intonation because they transferred their Thai intonation to their English intonation. Moreover, Thai learners were often too shy to pronounce English words with suitable stress and intonation. Wei and Zhou (2002) suggested that teachers had to provide a pronunciation course, and also provide learners with articulatory descriptions of the mother tongue and target language. In addition, Khaeram (2007) also pointed out that Thai learners had pronunciation problems with stress and intonation. Khaeram (2007) reveals Thai learners did not know how to use stress and intonation correctly, especially in yes/no questions and "wh" questions.

#### **1.5 Pronunciation Evaluation**

Pronunciation is one of the aspects of language learning that teachers should assess in order to measure their students' progress. There are two approaches to test pronunciation: holistic pronunciation testing (global, impressionistic) and atomistic pronunciation testing (analytic) (Alderson, Wall & Claphaim., 1996). Holistic pronunciation testing requires an examiner to focus on the learner's overall performance. Holistic pronunciation testing is suitable for large group evaluations. On the other hand, atomistic pronunciation testing requires a focus on the correctness of a learner's pronunciation in different categories, like vowels, consonants, stress, rhythm, and intonation. Szypra-kozlowska, Frankiewicz, Nowacka, and Stadnicka

(2005) have compared holistic and atomistic pronunciation testing and the results show that the scores from holistic pronunciation testing are higher than the scores from atomistic testing.

In this study, the speaking test was holistic pronunciation testing while the listening test is atomistic pronunciation testing.

## **2. The Use of Music in Language Class**

At the present time, music and songs are a large part of everyday life. We have been exposed to music and songs since we were babies. Music and songs can be used for teaching and learning a second language. Their pedagogical power have been known for centuries - Plato writes, "Music is a more potent instrument than any other for education." (Quoted in Lake (2002)). Many researchers have described the value of using music and songs in EFL classrooms (Morgan, 1992; Iwata, 2005; Rosova, 2007).

### **2.1 Musical Methodologies in Language classes**

#### **2.1.1 Suggestopedia**

Suggestopedia is a methodology concerning the use of music in language classes. This methodology was developed by Georgi Lozanov (1978). Lozanov believed that language teachers should know music skills and psychotherapeutic techniques. He used yoga techniques while teaching new dialogues. There are many elements of the Suggestopedia method, such as yoga, a dark room, and music. In addition, games, role plays and songs are used. The Suggestopedia method can help language learners to reduce their learning anxieties. The activities in the Suggestopedia method use rhythm and music in order to help learners remember new information. This method is usually used for listening skills. For example, teachers are told to play classical music while learners learn new conversation dialogues (Freeman, 1986, Richards & Rogers, 1986). In 1975, Bancroft used the Suggestopedia method and used music while teaching oral foreign language skills. Bancroft (1975) helped students to learn proper breathing and speaking rhythms in relation to musical rhythms. His results revealed that the music helped the learners feel relaxed.



In this study, music and songs were not classical music, but music and songs were used in order to make the students relax to better acquire new knowledge.

### **2.1.2 The Contemporary Music Approach**

The Contemporary Music Approach was created by Ronald J. Anton in 1990 (Salcedo, 2002). This teaching approach argues that music is suitable in the language classroom because music can help language acquisition and recall by enforcing grammatical structures from songs. Moreover, Anton (1990) also argues that Contemporary Music Approach helps learners use their right brain and left brain effectively.

### **2.2 Music and Language Acquisition**

In the field of second language acquisition, there are many theories that are related to how to use music and songs in the EFL classroom. Lake (2002) investigated questions of music use as way to enhance second language learner acquisition. He stated that many features of the Monitor Theories from Steven Krashen were related to the use of music and songs the in EFL classroom. Monitor Theory consists of five facets, of which only three became hypotheses in Lake's work. The three are the Affective Filter Hypothesis, the Monitor Hypothesis, and the Role of Natural Input Hypothesis. The affective filter hypothesis is related to this research, which uses music and songs for helping students relax to learn.

#### **Affective Filter Hypothesis**

The affective filter describes a learners' emotional predisposition and its effects on his language learning. Moreover, the condition of affective filter facilitates learning language. Krashen (1982) suggested that good language learners should have good conditions to learn, such as high motivation, high self-confidence and low anxiety. In this research, music and songs are used to decrease anxiety so the learners can relax when they learn the new material.

### **2.3 Advantages of Music and Songs for Teaching Language**

Music and songs are helpful for teaching and learning English as a second language in term of better linguistic acquisition, enhance learners' ability to use their whole brain.



### **2.3.1 Enhancing Learners' Ability to Communicate in Language Classes**

Music and songs were used to enhance language learners' ability to communicate in language classes. Orlova (1997) said that language teachers can prepare music and songs to promote learning English speaking in the classroom. The songs consisted of lyrics and music that learners could use to learn various contents such as metaphor or parts of conversations. In addition, Orlova suggested that in the field of second language, EFL teachers can use music and songs as a starting point of a conversation. After students learned the vocabulary and context in the songs, teachers can ask learners to work in groups to discuss the new words or new knowledge which were in the songs. Schoepp (2001) reveal that EFL classrooms were shifted from teacher-centered to communicative teaching. So, learners responded in class by using the automatic ability of communication. In songs, language learners could see the language used in daily life.

### **2.3.2 Better Linguistic Acquisition**

Music and songs can enhance learners' ability to learn language aspects such as grammar, vocabulary, pronunciation. In addition, songs can be used to teach the culture of the target language. Language can use lyrics to teach grammatical points because each song has a different grammar structure. Moreover, teachers can select songs by level of vocabulary that the language learner should know. For example, Cardoro and Vieira (2006) used songs to enhance language learners learning metaphors in song lyrics. In addition, learners learned about rhythm pattern of songs that related to the rhythm of natural English language.

### **2.3.3 Enhance Learners' Ability to Use Their Whole Brain**

Brain-based research shows that many second language teachers need to know how the brain works and how to apply this knowledge to their classrooms. The teachers realized that if they know how the brain works, the knowledge will help their learners to learn language more effectively. The researcher mentioned about biological data about human brain and seven principles for EFL teachers. Besides, the researcher stated that our brain uses twenty five percentage of our body energy. Hippocampus part in our brain can be used for learning and memorizing. The memory process is an important process to learn language. If the

learners can remember more information, they can learn and use language correctly. In addition, Lake (2002) said that music also stimulate both sides of the brain. Moreover, Orlova (1997) said that songs can promote learners to have a positive emotion to learn.

### **3. Computer-Assisted Language Learning**

#### **3.1 The History of CALL**

The computer has been used for learning and reinforcing physics and statistics at Florida University since 1958. Stanford University used the computer for learning mathematics and English. In 1960, Illinois University provided a terminal of CAI that could react with learners called the PLATO system (Programmed Logic for Automatic-Teaching Operation) (Heinich et al, 1993). In 1971, Cambridge University and Texas University developed the computer assisted learning with mini computers called TICCIT (Time-shared, Interactive, Computer-Controlled Information Television) (Alssi and Trollip, 1991). Then, Japan developed computer assistance for primary level and higher level (Alessi and Trollip, 1991 and Malithong, 1997). In 1961-1967, Thailand used computers of medium and large sizes for teaching and researching but computers had an expensive price (Sammawiphawikul 1998). In 1977, computers were cheaper, so many schools and universities could start to provide computers in their own facilities.

#### **3.2 Advantages of CALL**

Computer-Assisted Language Learning (CALL) has been used in second language research and classroom. The positive points of CALL have been discussed. Kenning & Kenning (1983), Srisa-ard (1998), Chanthong (2001), O' Shea and Self (1983) agreed that CALL has many capabilities which can be adapted for supporting second language learning. Second language learners can manage their own learning process. Faster and slower learners can learn in their own pace and they can choose suitable times and places to learn. Moreover, they can interact and receive immediate feedback from the learning program (Poole, 1995). Srisa-ard (1998), Chanthong, (2001) explain that effective learning with a CALL program should be adjusted to the level of the learner's ability. In addition, they also mention that CALL can provide interesting learning lessons with various techniques such as multimedia,

animation, music, graphics, pictures, color, sound recordings and interaction. CALL is simulated authentic situations and complicated activities which stimulate the learners to make their decisions to solve the problems.

Computer-assisted language learning has many advantages for effective learning because computers can provide interesting lessons that help learners to learn with positive emotion and atmosphere. Teachers and researchers can design interactive programs. Moreover, computer programs can reduce some problems with various levels of learners.

### **3.3 Limitation of CALL**

Computer-assisted language learning also has some limitations for effective teaching and learning. One of limitations of CALL is lack of well trained teachers and learners. Teachers should understand and be able to use the computer material before teaching the class. Teachers have to be knowledgeable on computer processing before instructing (Simic, 1994). Moreover, Malithong (2000) agreed that using CALL in language learning has some limitations. For example, price and maintenance of equipment and computer materials should be considered. Moreover, lack of standard equipment is also an important issue. For example, some software is only used for specific computers such as IBM or Macintosh. For the instructor, it is hard to construct computer material and it will be an additional workload for them. Constructing computer material is time consuming and they have to acquire some specific knowledge and computer ability. For the learners, some do not like the learning programs that their teachers construct and it will be a learning problem for them. Additionally, Tabsri (1992) added that using CALL for a long period of time has an effect on learners' eyesight. This could lead to emotional stress.

### **3.4 The Computer-Assisted Pronunciation Practices**

There are positive features about using computer-assisted systems for teaching pronunciation. Computer-assisted pronunciation practices, CAPP, is a feature of computer assisted language learning (AbuSeileek (2007.)). CAPP is used for teaching and learning various aspect of pronunciation in both segmental and suprasegmental features by using technology (AbuSeileek, 2007., Kedrowicz & Watanabe, 2006, Gruba, 2006). In addition, CAPP can transfer speech sound into

digital media by using a computer program (Kinsell, 1995). In teaching, learning, and researching, there are various purposes for using CAPP.

#### **4. Moodle and the Use of Moodle**

Moodle is an e-learning resource which is designed for educators. MOODLE stands for Modular Object-Oriented Dynamic Learning Environment (Brandl, 2005). Moodle is created for free use within the terms of a General Public License (GNU) and there is no licensing fee. The design of Moodle is not too sophisticated for teachers to create activities for their courses. Moreover, Moodle is suitable for e-learning in many universities. Many teachers in Khon Kaen University use Moodle to promote the e-learning lessons in many subjects.

Since the communicative skill in language learning has become popular, computers have been used to promote interaction among teachers and learners. Moreover, a computer programs have been used to foster lifelong learning. Moodle is useful for teachers to provide the suitable materials for their learners such as quizzes, exercises, tests, and journals. In addition, learners can share their ideas through group discussion.

The present study, Moodle was used as an e-learning module that provides the coursework for the participants. In addition, the participants had to do a pre-test, apost-test and a questionnaire, which were uploaded in Moodle. There were many features of Moodle that were used in this study, such as recording the time when the participants used the program. Moreover, the participants could learn with Moodle anywhere where there was a computer and an Internet connection.

#### **5. Autonomous Learning**

Autonomous learning is one of the learning goals in the field of education because autonomous learning is crucial for a learners' ability to learn by themselves. Although, the definition of autonomous learning is still debated (Chan, 2003; Little 2002), many teachers, material producers, and researchers focus on promoting learners to reach the goal of learning autonomously. A famous definition about autonomous learning is "the ability to take charge of one's own learning" Holec (1981). The broad meaning of autonomous learning is that learners take responsibility

for their learning, the effects of their learning and their decision to satisfy their needs (Dickinson, 1995). Nevertheless, the teacher still plays a major role in fostering learners' autonomy (Gardner & Miller 1999). Furthermore, the teacher has to plan the learning course. In addition, Dickinson (1995) mentions that autonomous learning is related to motivation. From the study, Dickinson suggests that the learners who learned autonomously had higher motivation and greater progress than others.

In the present study, autonomous learning was promoted by using the computer-assisted pronunciation practices which learners had to learn by themselves. The learners had to decide the suitable time and place for their learning.

## **6. Related Studies**

### **6.1 Related Studies About Pronunciation: Suprasegmentals**

There are many related studies on pronunciation teaching, especially suprasegmental aspects such as rhythm, word stress, and intonation. In 1988, Yasuyo studied English rhythm and its teaching to non-native English speakers. Yasuyo said the difference of the characteristics of stress-timed language, English, and syllable-timed language, Japanese, makes it difficult for Japanese learners to acquire English rhythm. Consequently, Yasuyo used musical notes as a visual aid to help Japanese learners to improve the intelligibility of their English pronunciation. The result showed that Japanese learners could improve the intelligibility of their pronunciation. The result implies that musical notes can help non-native English speakers acquire English rhythm. Moreover, non-native English speakers who are able to be exposed to an English language environment could receive higher scores because the English experience can help learners acquire correct English word stress. This was found in the study of Jarusan (1997), who looked at perception and production of English word stress of first-year students at Rang Sit University. Moreover, Ilciukiene (2005) stated that second language learners have to understand English rhythm and intonation. He also mentioned about the suprasegmental aspects of speech production. Ilciukiene (2005) found that songs, especially jazz chant, can be used to teach the natural rhythm, stress, and intonation. Besides, jazz chant can be used to recall grammatical points, enlarge vocabulary, and develop learners' listening and speaking skills. In addition, jazz chants can be used to introduce learners to the target culture, to

create an interesting and relaxing atmosphere, to encourage learners to participate in class, and to increase their interaction. In addition, Sidalad (2005) found that adult learners can more easily acquire English pronunciation. She developed an English pronunciation guide for Thai adult learners using the Thai alphabets.

## **6.2 Related Studies on Music and Songs**

There are many studies about using music and songs for teaching in the EFL classroom. For example, Le (1999) studied the role of music in second language learning from a Vietnamese perspective. The author said that music in language learning is in the primary stage. The aim of the study was to investigate the role of music from the perspective of Vietnamese teachers and learners. Some learners have success by learning with music. This research found that music and communicating through songs lyrics were very important to language learning. Music and songs help learners to be aware of the differences of L1 and L2. Music can bridge the gap between teachers and learners. In addition, music made learners feel more positive toward English.

Cardoso and Vieira (2006) did a study on the interpretation of metaphorical expressions in song lyrics by EFL learners. The authors mentioned that most of the EFL teachers tried to provide a link between literature and the teaching of a foreign language. The literature text can be difficult for the learners to understand because it consists of many metaphorical expressions. Moreover, considering the meaning of a metaphor is not easy for the EFL teachers and learners to understand. If learners do not have enough cultural and linguistic knowledge of L1 and L2, they may fail to understand and interpret the meaning intended by the writer. This researcher decided to investigate readers' cognitive processes of making sense of metaphorical expression in song lyrics in the foreign language classroom. Moreover, music can help the learners to remember the text more than those learners who did not study using music. Salcedo (2002) studied the effect of songs in the foreign language classroom on text recall and involuntary mental rehearsal. Salcedo found that songs could aid the language learners to increase text memory.

Furthermore, the teachers have to think about the learners' interaction while using music for teaching pronunciation. Iwata (2005) studied the effect of active and passive participation with music on the foreign language acquisition and

emotional state of university music students. The subjects were English native speakers who were studying music. They never experienced the Japanese language. They were divided into two groups. One group was the experimental group, called the active group. They were taught Japanese language by singing and seeing the signs. The other group was a passive group that learned Japanese language by watching and listening. The result from post-test found that learners in the active group increased vocabulary knowledge and pronunciation more than learners in the passive group.

In addition, using music to increase learners' pronunciation is found to have a positive result. Folk songs, rap songs, and jazz chants were used to help learners to acquire the language pronunciation. For example, Yasuyo(1988), mentioned earlier, , studied about teaching English rhythm by using musical notes. The result revealed a positive way to use music to teach pronunciation. In addition, Spicher & Sweeney (2007) studied folk music in L2 classroom development of native-like pronunciation through prosodic engagement strategies. Adult learners who want to acquire native-like pronunciation should engage in the target language environment. The researchers suggested that folk music is one method for adult learners to assimilate the sound system of native-like pronunciation because there are unique prosody patterns in folk music. These patterns in folk songs could help adult learners improve their ear and voice of for the target language. However, native like pronunciation had become out of date. It has been replaced by the intelligibility of pronunciation, which is the main goal in communicative language teaching.

In addition, jazz chant is also used to teach English stress. Soudorn (2002) found that the learners speaking ability increase after using jazz chant exercises. Moreover, the students also have a positive attitude for jazz chants. The studies by Fischler (2005) found that using rap music could improve secondary language learners' intelligibility pronunciation. The researcher used music to teach stress patterns of English. The learners can improve their self-confidence to communicate with native speakers, too.

### **6.3 Related Studies on Computer-Assisted Pronunciation Practices**

Computer-assisted pronunciation practices have been used in studies of English pronunciation. Commercial programs were used in many studies, such as Hincks (2002), who used a commercial program called WaveSurfer to help learners to

*see* their feedback. The program synthesizes the words that the learners pronounce. They can listen to their recorded voice in the computer program. The result revealed that learners had positive progress on the word stress placement. Similarly, Seferoglu (2005) used commercial accent reduction software in a multimedia language laboratory. This study revealed that the learners had improvement in pronunciation although they had little exposure to an English language setting. The researcher mentions that the technology can help the learners to improve their pronunciation skill. Furthermore, technology can help language learners to increase their pronunciation ability. The instructors have to think about the learners learning style, as well.

Kongkeo (2002), carried out research in Thailand about the effects of rhythmic method in multimedia lessons and learning exposure upon English pronunciation achievement of Thai and Chinese undergraduates with different learning styles. She used the rhythmic methods of ball queuing and color-bar queuing to teach word stress with computer-assisted language learning. Thai learners and Chinese learners were grouped by the researcher. Thai learners were divided into two groups: one group learned multimedia lessons with ball queuing and the other group learned with color-bar queuing. Chinese learners were divided in the same way. She found that both groups of learners (the ball queuing and the color-bar queuing) did not have different progress on their achievement tests. She concluded that both of the methods were effective methods for learning word stress. She found that the learners who have a different learning style had different learning achievement.

There are other studies on learning the suprasegmentals on computers, such as Hardison (2004) who used the computer to teach suprasegmentals to English native speakers who learned French. They were trained only on the suprasegmentals and they were asked to record their pre-test and post-test. The scores were judged by native French speakers. Although the learners were trained only on the suprasegmental aspects, they improved both segmentals and suprasegmentals. This finding supported the idea of Gilbert (1993) that teachers should teach suprasegmentals with segmental.

In 2005, Chompuboot mentioned that there were no suitable commercial programs for Thai learners, so Chompuboot developed computer-assisted

language learning materials for practicing word stress and intonation in English for second-year English majors, Faculty of Education, Silpakorn University. The result found that CALL was suitable for the learners with an efficiency higher than the expected criterion of 75/75. Moreover, the learners had a higher ability of listening and pronunciation skills and their attitude about the CALL was positive.

In conclusion, suprasegmentals are the important aspect for non-native English language learners to know in order to meet the goal of successful communication. To gain the knowledge of suprasegmentals, there are many ways for language teachers to design the course. However, the computer is still an interesting method for language teachers and language learners. In addition, music and songs can be applied for use in the language class. Learning suprasegmentals with the positive emotion can help language learners retain knowledge in long term memory. In a previous study (Hardison, 2004, Chompuboot, 2005), the learning process used audio sounds of the native speakers' voices. The teachers asked their students to listen, mimic, and pronounce the sounds they heard with the appropriate sounds. They did not use music and songs. The present study constructed the computer-assisted language learning by using music as a means to teach the suprasegmental features (word stress, sentence stress and intonation) for non-native English learner.